



Kerr-McGee Oil & Gas Onshore LP  
1999 Broadway, Suite 3700  
Denver, CO 80205

September 19, 2007

Mrs. Diana Mason  
Division of Oil, Gas and Mining  
P.O. Box 145801  
Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11  
NBU 922-18K1BS  
T9S R22E  
Section 18: NESW  
NESW, 2524' FSL, 1256' FWL (surface)  
NESW, 2602' FSL, 1821' FWL (bottom hole)  
Uintah County, Utah

Dear Mrs. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 922-18K1BS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore and the W/2, W/2NE/4 and SE/4 of Section 18 (federal leases USA UTU-0359, USA-UTU 0359-A and USA-UTU 0461).

Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

James C. Colligan III  
Landman

**RECEIVED**  
NOV 20 2007  
DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

1a. Type of Work: ☒ DRILL ☐ REENTER

b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

2. Name of Operator  
**KERR MCGEE OIL AND GAS ONSHORE LP**

3A. Address  
**1368 SOUTH 1200 EAST VERNAL, UT 84078**

3b. Phone No. (include area code)  
**(435) 781-7024**

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)

At surface **NE/SW 2524'FSL, 1256'FWL**

At proposed prod. Zone **NE/SW 2602'FSL, 1821'FWL**

14. Distance in miles and direction from nearest town or post office\*  
**27.95 +/- MILES FROM OURAY, UTAH**

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any)  
**1256'**

16. No. of Acres in lease  
**162.39**

17. Spacing Unit dedicated to this well  
**40.00**

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft.

**REFER TO  
TOPO C**

19. Proposed Depth  
**9889'**

20. BLM/BIA Bond No. on file  
**RLB0005239**

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
**4899'GL**

22. Approximate date work will start\*  
**UPON APPROVAL**

23. Estimated duration  
**TO BE DETERMINED**

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.

2. A Drilling Plan.

3. A Surface Use Plan (if the location is on National Forest System Lands, the  
SUPO shall be filed with the appropriate Forest Service Office.

4. Bond to cover the operations unless covered by an existing bond on file (see  
Item 20 above).

5. Operator certification.

6. Such other site specific information and/or plans as may be required by the  
authorized office.

25. Signature

Name (Printed/Typed)

**SHEILA UPCHEGO**

Date

**11/16/2007**

Title

**SENIOR LAND ADMIN SPECIALIST**

Approved by (Signature)

Name (Printed/Typed)

**BRADLEY G. HILL**

Date

**12-03-07**

Title

Office **ENVIRONMENTAL MANAGER**

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

Sur f

629224X  
4432605Y  
40.035669  
-109.485405

BHL

629396X  
4432632Y  
40.035889  
-109.483391

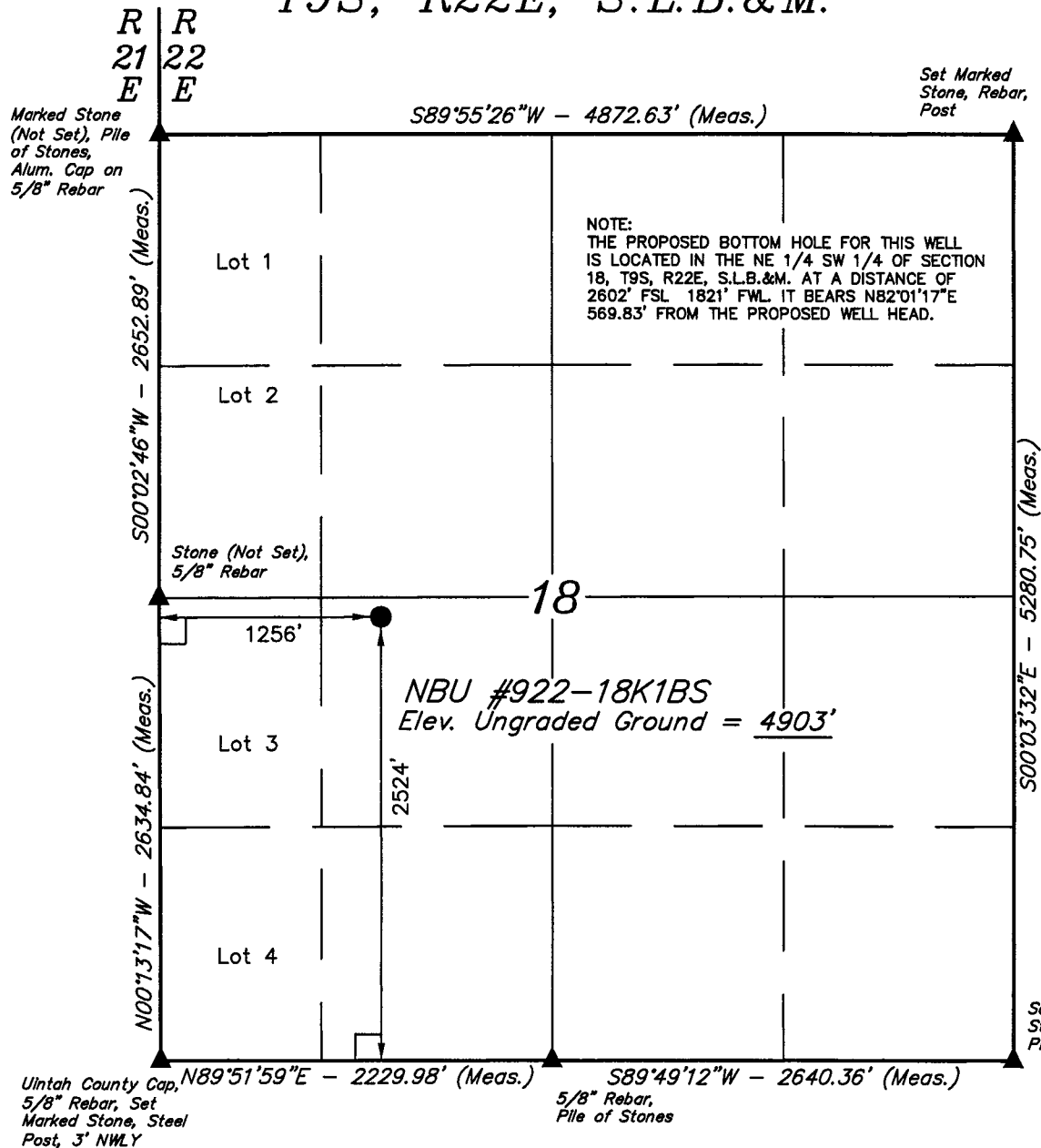
Federal Approval of this  
Action is Necessary

RECEIVED

NOV 20 2007

DIV. OF OIL, GAS & MINING

T9S, R22E, S.L.B.&M.



LEGEND:

└─ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

(NAD 83)

LATITUDE = 40°02'08.40" (40.035667)

LONGITUDE = 109°29'10.48" (109.486244)

(NAD 27)

LATITUDE = 40°02'08.53" (40.035703)

LONGITUDE = 109°29'08.01" (109.485558)

Kerr-McGee Oil & Gas Onshore LP

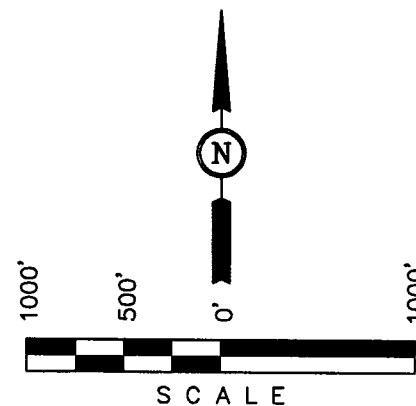
Well location, NBU #922-18K1BS, located as shown in the NE 1/4 SW 1/4 of Section 18, T9S, R22E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK (20EAM) LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

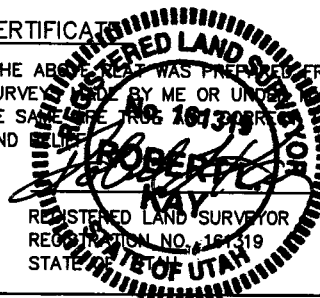
BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEY MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF.



UINTAH ENGINEERING & LAND SURVEYING  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

SCALE 1" = 1000'		DATE SURVEYED: 05-07-07	DATE DRAWN: 05-21-07
PARTY D.K. L.K. C.H.		REFERENCES G.L.O. PLAT	
WEATHER WARM		FILE Kerr-McGee Oil & Gas Onshore LP	

**NBU 922-18K1BS  
NE/SW SEC. 18, T9S, R22E  
UINTAH COUNTY, UTAH  
UTU-0359**

**ONSHORE ORDER NO. 1**

***DRILLING PROGRAM***

**1. Estimated Tops of Important Geologic Markers:**

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	1752'
Top of Birds Nest Water	2050'
Mahogany	2412'
Wasatch	4999'
Mesaverde	7764'
MVU2	8685'
MVL1	9183'
TVD	9820'
TD (MD)	9889'

**2. Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:**

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River	1752'
	Top of Birds Nest Water	2050'
	Mahogany	2412'
Gas	Wasatch	4999'
Gas	Mesaverde	7764'
Gas	MVU2	8685'
Gas	MVL1	9183'
Water	N/A	
Other Minerals	N/A	

**3. Pressure Control Equipment (Schematic Attached)**

*Please see the Natural Buttes Unit Standard Operating Procedure (SOP).*

**4. Proposed Casing & Cementing Program:**

*Please see the Natural Buttes Unit SOP.*

**5. Drilling Fluids Program:**

*Please see the Natural Buttes Unit SOP.*

6. **Evaluation Program:**

*Please see the Natural Buttes Unit SOP.*

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 9889' TD, approximately equals 6131 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3955 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

*Drilling is planned to commence immediately upon approval of this application.*

9. **Variances:**

*Please see Natural Buttes Unit SOP.*

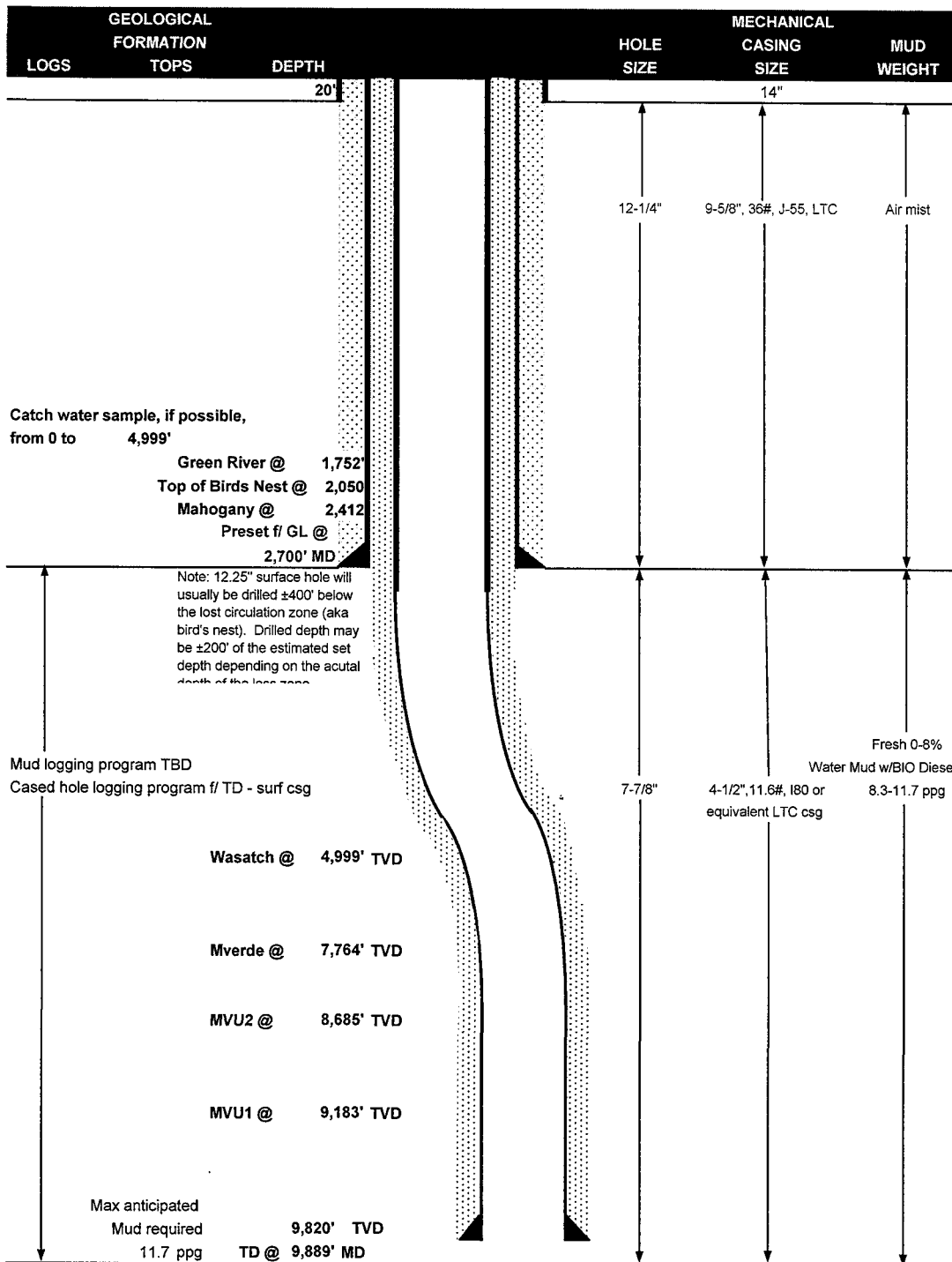
10. **Other Information:**

*Please see Natural Buttes Unit SOP.*



# KERR-McGEE OIL & GAS ONSHORE LP **DRILLING PROGRAM**

COMPANY NAME KERR-McGEE OIL & GAS ONSHORE LP DATE November 16, 2007  
WELL NAME NBU 922-18K1BS TD 9,889' MD 9,820' TVD  
FIELD Natural Buttes COUNTY Uintah STATE Utah ELEVATION 4,899' GL KB 4,914'  
SURFACE LOCATION NE/SW SEC. 18, T9S, R22E 2524'FSL, 1256'FWL  
Latitude: 40.035667 Longitude: 109.486244  
BTM HOLE LOCATION NE/SW SEC. 18, T9S, R22E 2602'FSL, 1821'FWL  
OBJECTIVE ZONE(S) Wasatch/Mesaverde  
ADDITIONAL INFO Regulatory Agencies: TRIBAL SURFACE, BLM MINERALS, UDOGM, Tri-County Health Dept.





# **KERR-McGEE OIL & GAS ONSHORE LP** **DRILLING PROGRAM**

## **CASING PROGRAM**

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				3520	2020	453000
SURFACE	9-5/8"	0 to 2700	36.00	J-55	LTC	0.92	1.60	5.93
PRODUCTION	4-1/2"	0 to 9889	11.60	I-80	LTC	2.03	1.06	201000

- 1) Max Anticipated Surf. Press. (MASP) (Surface Casing) = (Pore Pressure at next csg point - (0.22 psi/ft - partial evac gradient x TVD of next csg point))  
2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft - partial evac gradient x TD)  
(Burst Assumptions: TD = 0.0 ppg) .22 psi/ft = gradient for partially evac wellbore  
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing \* Buoy. Fact. of water)  
MASP 3841 psi

## **CEMENT PROGRAM**

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl + .25 pps flocele	215	60%	15.60	1.18
<b>Option 1</b>							
	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt + 2% CaCl + .25 pps flocele	50		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE	LEAD	1500	65/35 Poz + 6% Gel + 10 pps gilsonite + .25 pps Flocele + 3% salt BWOW	360	35%	12.60	1.31
<b>Option 2</b>							
	TAIL	500	Premium cmt + 2% CaCl + 25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	7,259'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	790	60%	11.00	3.38
	TAIL	2,630'	50/50 Poz/G + 10% salt + 2% gel + .1% R-3	740	60%	14.30	1.31

\*Substitute caliper hole volume plus 15% excess if accurate caliper is obtained

## **FLOAT EQUIPMENT & CENTRALIZERS**

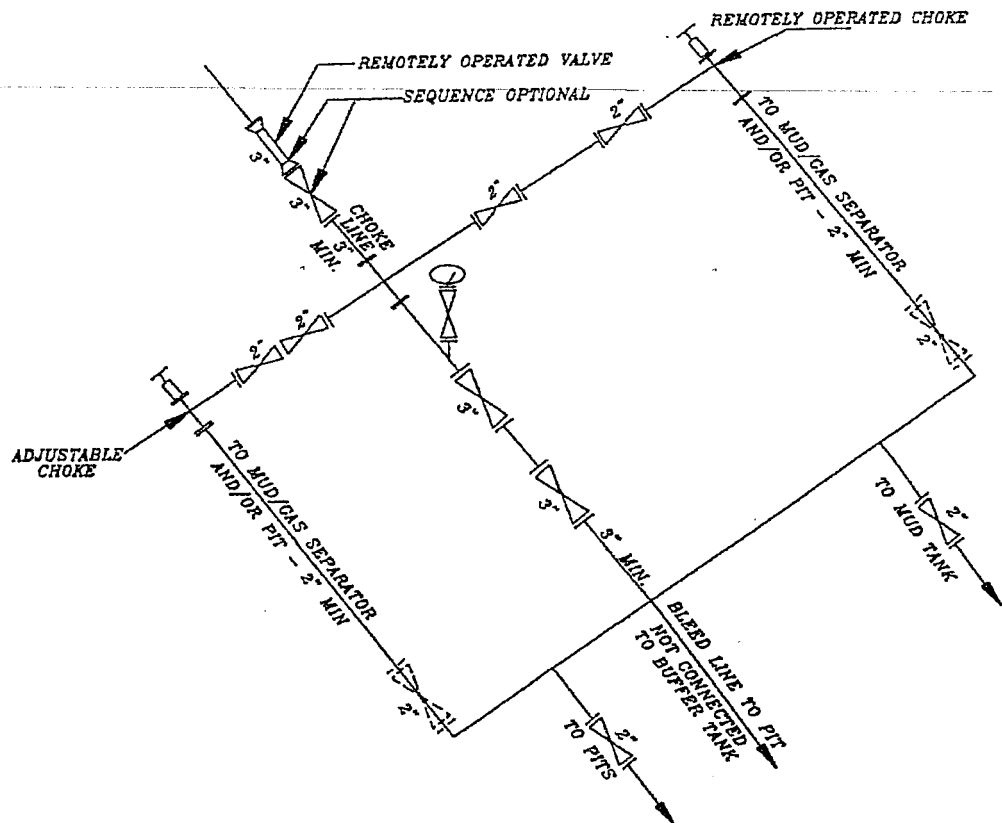
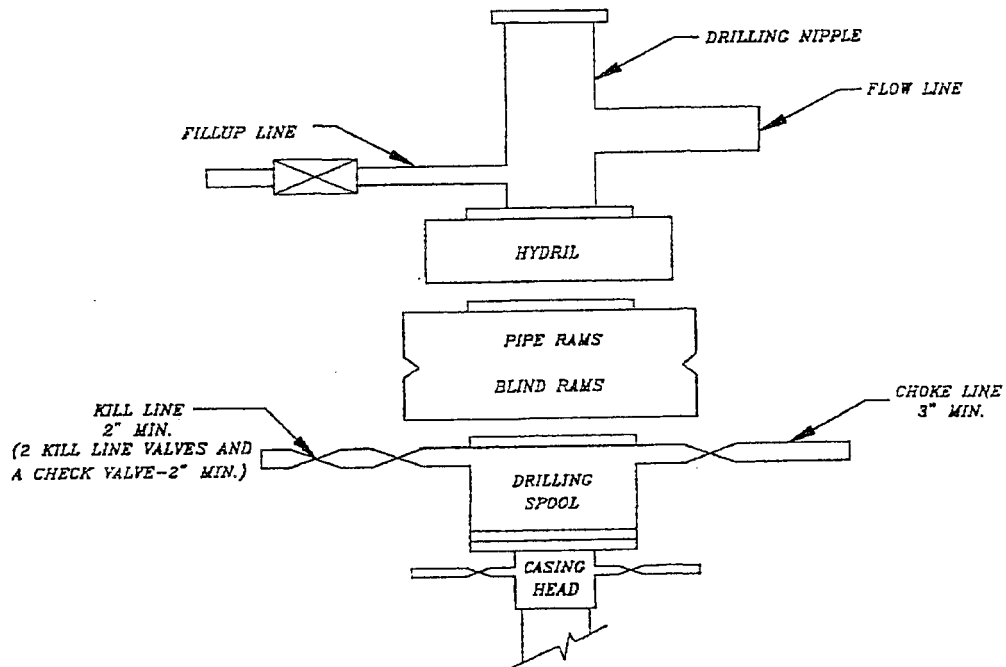
SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

## **ADDITIONAL INFORMATION**

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.  
BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.  
Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.  
Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

**DRILLING ENGINEER:** \_\_\_\_\_ **DATE:** \_\_\_\_\_  
Brad Laney  
**DRILLING SUPERINTENDENT:** \_\_\_\_\_ **DATE:** \_\_\_\_\_  
Randy Bayne

# 5M BOP STACK and CHOKE MANIFOLD SYSTEM







**Weatherford<sup>®</sup>**

## **Drilling Services**

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## **Proposal**

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**Anadarko**

  
**KerrMcGee**

### **ANADARKO - KERR McGEE**

NBU 922-18K1BS

UINTAH COUNTY, UTAH

WELL FILE: PLAN 2

DATE: OCTOBER 3, 2007

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**Weatherford International, Ltd.**

15710 John F. Kennedy Blvd

Houston, Texas 77032 USA

+1.281.260.1300 Main

+1.281.260.4730 Fax

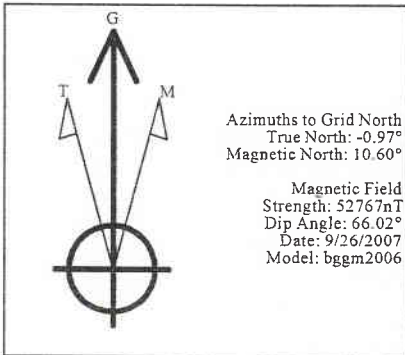
[www.weatherford.com](http://www.weatherford.com)



ANADARKO KERR MCGEE OIL & GAS  
NBU 922-18K1BS  
UINTAH COUNTY, UTAH



Weatherford



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	40.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	500.00	0.00	40.00	500.00	0.00	0.00	0.00	40.00	0.00	
3	800.00	3.00	40.00	799.86	6.02	5.05	1.00	40.00	5.91	
4	860.00	3.00	40.00	859.78	8.42	7.07	0.00	0.00	8.28	
5	1460.00	0.00	82.99	1459.51	20.45	17.16	0.50	180.00	20.10	
6	2800.49	0.00	82.99	2800.00	20.45	17.16	0.00	220.00	20.10	
7	3477.64	16.93	82.99	3467.34	32.57	115.73	2.50	0.00	119.36	
8	4457.53	16.93	82.99	4404.77	67.40	398.92	0.00	0.00	404.54	
9	5586.11	0.00	82.99	5517.00	87.60	563.20	1.50	180.00	569.97	
10	9889.11	0.00	82.99	9820.00	87.60	563.20	0.00	82.99	569.97	PBHL

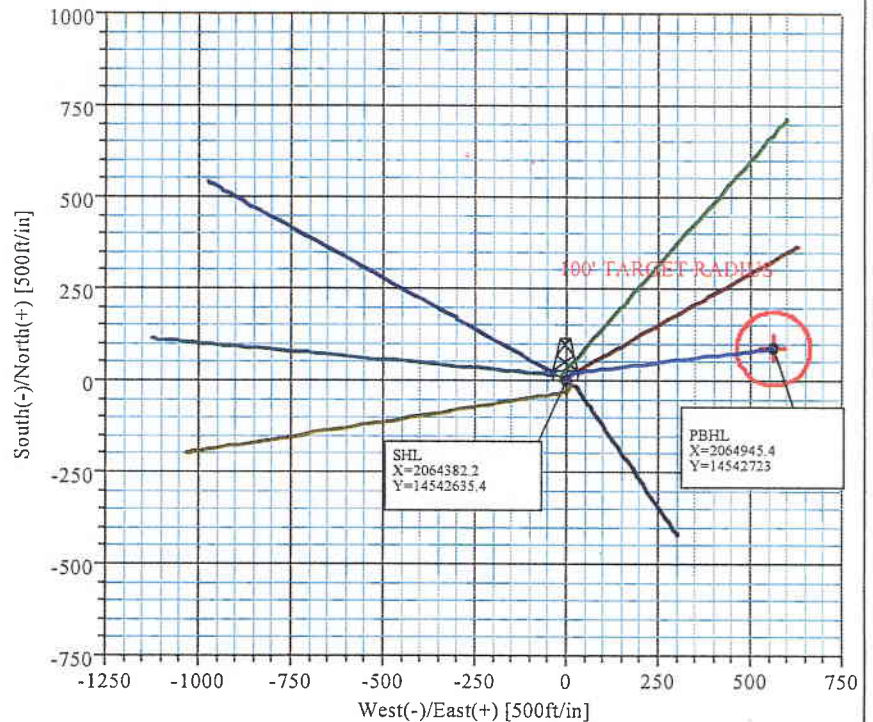
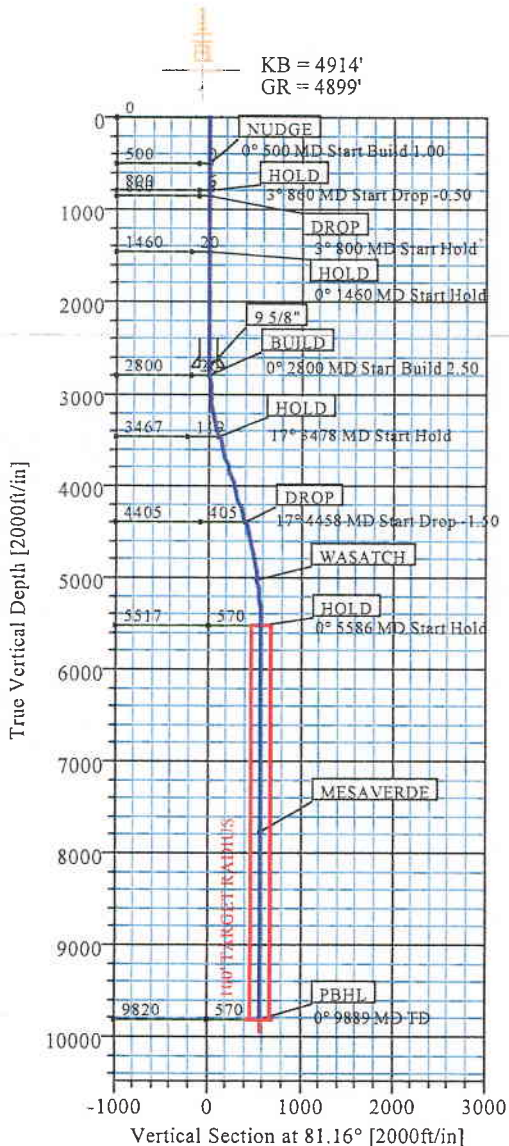
WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
18K1BS	0.00	0.00	14542635.40	2064382.20	40°02'08.384N	109°29'07.423W	N/A

CASING DETAILS				
No.	TVD	MD	Name	Size
1	2700.00	2700.49	9 5/8"	9.62

FORMATION TOP DETAILS			
No.	TVDPath	MDPath	Formation
1	5017.00	5084.67	WASATCH
2	7763.00	7832.11	MESAVERDE

FIELD DETAILS	
UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	
Geodetic System:	Universal Transverse Mercator (USfeet)
Ellipsoid:	NAD27 (Clarke 1866)
Zone:	UTM Zone 12, North 114W to 108W
Magnetic Model:	bggm2006
System Datum:	Mean Sea Level
Local North:	Grid North

LEGEND	
18E3BS (1)	
18E3CS (1)	
18F4BS (1)	
18F4CS (1)	
18K2 (1)	
18K2DS (1)	
18L2BS (1)	
Plan #2 18K1BS	



# Weatherford Drilling Services

## DIRECTIONAL PLAN REPORT



**Weatherford**

<b>Company:</b> Anadarko-Kerr-McGee <b>Field:</b> UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) <b>Site:</b> NBU 922-18K1BS PAD EFKL <b>Well:</b> 18K1BS <b>Wellpath:</b> 1	<b>Date:</b> 10/4/2007 <b>Co-ordinate(NE) Reference:</b> Site: NBU 922-18K1BS PAD EFKL, Grid Nort <b>Vertical (TVD) Reference:</b> SITE 4914.0 <b>Section (VS) Reference:</b> Well (0.00N,0.00E,81.16Azi) <b>Survey Calculation Method:</b> Minimum Curvature	<b>Time:</b> 08:06:32 <b>Page:</b> 1 <b>Db:</b> Sybase
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<b>Plan:</b> Plan #2 18K1BS <b>Principal:</b> Yes	<b>Date Composed:</b> 10/4/2007 <b>Version:</b> 1 <b>Tied-to:</b> From Surface
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**Field:** UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

<b>Map System:</b> Universal Transverse Mercator (USfeet) <b>Geo Datum:</b> NAD27 (Clarke 1866) <b>Sys Datum:</b> Mean Sea Level	<b>Map Zone:</b> UTM Zone 12, North 114W to 108W <b>Coordinate System:</b> Site Centre <b>Geomagnetic Model:</b> bggm2006
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**Site:** NBU 922-18K1BS PAD EFKL

2524 FSL, 1256 FWL - SEC18 T9S R22E

<b>Site Position:</b> <b>From:</b> Map <b>Position Uncertainty:</b> 0.00 ft <b>Ground Level:</b> 4899.00 ft	<b>Northing:</b> 14542635.40 ft <b>Easting:</b> 2064382.20 ft	<b>Latitude:</b> 40 2 8.384 N <b>Longitude:</b> 109 29 7.423 W <b>North Reference:</b> Grid <b>Grid Convergence:</b> 0.97 deg
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**Well:** 18K1BS **Slot Name:**

<b>Well Position:</b> +N/-S 0.00 ft <b>Position Uncertainty:</b> 0.00 ft	<b>Northing:</b> 14542635.40 ft <b>Easting:</b> 2064382.20 ft	<b>Latitude:</b> 40 2 8.384 N <b>Longitude:</b> 109 29 7.423 W
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**Wellpath:** 1

<b>Current Datum:</b> SITE <b>Magnetic Data:</b> 9/26/2007 <b>Field Strength:</b> 52767 nT <b>Vertical Section:</b> Depth From (TVD) ft	<b>Height</b> 4914.00 ft	<b>Drilled From:</b> Surface <b>Tie-on Depth:</b> 0.00 ft <b>Above System Datum:</b> Mean Sea Level <b>Declination:</b> 11.57 deg <b>Mag Dip Angle:</b> 66.02 deg
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0.00	0.00	0.00
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### Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	40.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	40.00	500.00	0.00	0.00	0.00	0.00	0.00	40.00	
800.00	3.00	40.00	799.86	6.02	5.05	1.00	1.00	0.00	40.00	
860.00	3.00	40.00	859.78	8.42	7.07	0.00	0.00	0.00	0.00	
1460.00	0.00	82.99	1459.51	20.45	17.16	0.50	-0.50	0.00	180.00	
2800.49	0.00	82.99	2800.00	20.45	17.16	0.00	0.00	0.00	220.00	
3477.64	16.93	82.99	3467.34	32.57	115.73	2.50	2.50	0.00	0.00	
4457.53	16.93	82.99	4404.77	67.40	398.92	0.00	0.00	0.00	0.00	
5586.11	0.00	82.99	5517.00	87.60	563.20	1.50	-1.50	0.00	180.00	
9889.11	0.00	82.99	9820.00	87.60	563.20	0.00	0.00	0.00	82.99	PBHL

### Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
500.00	0.00	40.00	500.00	0.00	0.00	0.00	0.00	14542635.40	2064382.20	NUDGE
600.00	1.00	40.00	599.99	0.67	0.56	0.66	1.00	14542636.07	2064382.76	
700.00	2.00	40.00	699.96	2.67	2.24	2.63	1.00	14542638.07	2064384.44	
800.00	3.00	40.00	799.86	6.02	5.05	5.91	1.00	14542641.42	2064387.25	HOLD
860.00	3.00	40.00	859.78	8.42	7.07	8.28	0.00	14542643.82	2064389.27	DROP
900.00	2.80	40.00	899.73	9.97	8.37	9.80	0.50	14542645.37	2064390.57	
1000.00	2.30	40.00	999.63	13.38	11.23	13.15	0.50	14542648.78	2064393.43	
1100.00	1.80	40.00	1099.57	16.12	13.53	15.84	0.50	14542651.52	2064395.73	
1200.00	1.30	40.00	1199.53	18.19	15.26	17.88	0.50	14542653.59	2064397.46	
1300.00	0.80	40.00	1299.51	19.60	16.44	19.26	0.50	14542655.00	2064398.64	
1400.00	0.30	40.00	1399.51	20.33	17.06	19.98	0.50	14542655.73	2064399.26	
1460.00	0.00	82.99	1459.51	20.45	17.16	20.10	0.50	14542655.85	2064399.36	HOLD

# Weatherford Drilling Services

## DIRECTIONAL PLAN REPORT



<b>Company:</b> Anadarko-Kerr-McGee <b>Field:</b> UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) <b>Site:</b> NBU 922-18K1BS PAD EFKL <b>Well:</b> 18K1BS <b>Wellpath:</b> 1	<b>Date:</b> 10/4/2007 <b>Co-ordinate(NE) Reference:</b> Site: NBU 922-18K1BS PAD EFKL, Grid Nort <b>Vertical (TVD) Reference:</b> SITE 4914.0 <b>Section (VS) Reference:</b> Well (0.00N,0.00E,81.16Azi) <b>Survey Calculation Method:</b> Minimum Curvature <b>Db:</b> Sybase
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### Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
1500.00	0.00	82.99	1499.51	20.45	17.16	20.10	0.00	14542655.85	2064399.36	
1600.00	0.00	82.99	1599.51	20.45	17.16	20.10	0.00	14542655.85	2064399.36	
1700.00	0.00	82.99	1699.51	20.45	17.16	20.10	0.00	14542655.85	2064399.36	
1800.00	0.00	82.99	1799.51	20.45	17.16	20.10	0.00	14542655.85	2064399.36	
1900.00	0.00	82.99	1899.51	20.45	17.16	20.10	0.00	14542655.85	2064399.36	
2000.00	0.00	82.99	1999.51	20.45	17.16	20.10	0.00	14542655.85	2064399.36	
2100.00	0.00	82.99	2099.51	20.45	17.16	20.10	0.00	14542655.85	2064399.36	
2200.00	0.00	82.99	2199.51	20.45	17.16	20.10	0.00	14542655.85	2064399.36	
2300.00	0.00	82.99	2299.51	20.45	17.16	20.10	0.00	14542655.85	2064399.36	
2400.00	0.00	82.99	2399.51	20.45	17.16	20.10	0.00	14542655.85	2064399.36	
2500.00	0.00	82.99	2499.51	20.45	17.16	20.10	0.00	14542655.85	2064399.36	
2600.00	0.00	82.99	2599.51	20.45	17.16	20.10	0.00	14542655.85	2064399.36	
2700.00	0.00	82.99	2699.51	20.45	17.16	20.10	0.00	14542655.85	2064399.36	
2700.49	0.00	82.99	2700.00	20.45	17.16	20.10	0.00	14542655.85	2064399.36	9 5/8"
2800.00	0.00	82.99	2799.51	20.45	17.16	20.10	0.00	14542655.85	2064399.36	
2800.49	0.00	82.99	2800.00	20.45	17.16	20.10	0.00	14542655.85	2064399.36	BUILD
2900.00	2.49	82.99	2899.48	20.71	19.30	22.26	2.50	14542656.11	2064401.50	
3000.00	4.99	82.99	2999.25	21.51	25.77	28.77	2.50	14542656.91	2064407.97	
3100.00	7.49	82.99	3098.65	22.84	36.56	39.63	2.50	14542658.24	2064418.76	
3200.00	9.99	82.99	3197.49	24.69	51.63	54.81	2.50	14542660.09	2064433.83	
3300.00	12.49	82.99	3295.56	27.07	70.97	74.29	2.50	14542662.47	2064453.17	
3400.00	14.99	82.99	3392.69	29.97	94.54	98.02	2.50	14542665.37	2064476.74	
3477.64	16.93	82.99	3467.34	32.57	115.73	119.36	2.50	14542667.97	2064497.93	HOLD
3500.00	16.93	82.99	3488.73	33.37	122.19	125.87	0.00	14542668.77	2064504.39	
3600.00	16.93	82.99	3584.40	36.92	151.09	154.97	0.00	14542672.32	2064533.29	
3700.00	16.93	82.99	3680.06	40.47	179.99	184.07	0.00	14542675.87	2064562.19	
3800.00	16.93	82.99	3775.73	44.03	208.89	213.18	0.00	14542679.43	2064591.09	
3900.00	16.93	82.99	3871.40	47.58	237.79	242.28	0.00	14542682.98	2064619.99	
4000.00	16.93	82.99	3967.06	51.14	266.69	271.38	0.00	14542686.54	2064648.89	
4100.00	16.93	82.99	4062.73	54.69	295.59	300.49	0.00	14542690.09	2064677.79	
4200.00	16.93	82.99	4158.40	58.25	324.49	329.59	0.00	14542693.65	2064706.69	
4300.00	16.93	82.99	4254.06	61.80	353.39	358.69	0.00	14542697.20	2064735.59	
4400.00	16.93	82.99	4349.73	65.35	382.29	387.80	0.00	14542700.75	2064764.49	
4457.53	16.93	82.99	4404.77	67.40	398.92	404.54	0.00	14542702.80	2064781.12	DROP
4500.00	16.29	82.99	4445.46	68.88	410.97	416.67	1.50	14542704.28	2064793.17	
4600.00	14.79	82.99	4541.80	72.15	437.56	443.45	1.50	14542707.55	2064819.76	
4700.00	13.29	82.99	4638.81	75.11	461.64	467.70	1.50	14542710.51	2064843.84	
4800.00	11.79	82.99	4736.43	77.76	483.20	489.41	1.50	14542713.16	2064865.40	
4900.00	10.29	82.99	4834.57	80.10	502.20	508.55	1.50	14542715.50	2064884.40	
5000.00	8.79	82.99	4933.18	82.12	518.66	525.12	1.50	14542717.52	2064900.86	
5084.67	7.52	82.99	5017.00	83.59	530.58	537.12	1.50	14542718.99	2064912.78	WASATCH
5100.00	7.29	82.99	5032.20	83.83	532.54	539.10	1.50	14542719.23	2064914.74	
5200.00	5.79	82.99	5131.54	85.22	543.85	550.48	1.50	14542720.62	2064926.05	
5300.00	4.29	82.99	5231.16	86.29	552.57	559.27	1.50	14542721.69	2064934.77	
5400.00	2.79	82.99	5330.96	87.05	558.70	565.44	1.50	14542722.45	2064940.90	
5500.00	1.29	82.99	5430.89	87.48	562.24	569.00	1.50	14542722.88	2064944.44	
5586.11	0.00	82.99	5517.00	87.60	563.20	569.97	1.50	14542723.00	2064945.40	HOLD
5600.00	0.00	82.99	5530.89	87.60	563.20	569.97	0.00	14542723.00	2064945.40	
5700.00	0.00	82.99	5630.89	87.60	563.20	569.97	0.00	14542723.00	2064945.40	
5800.00	0.00	82.99	5730.89	87.60	563.20	569.97	0.00	14542723.00	2064945.40	
5900.00	0.00	82.99	5830.89	87.60	563.20	569.97	0.00	14542723.00	2064945.40	
6000.00	0.00	82.99	5930.89	87.60	563.20	569.97	0.00	14542723.00	2064945.40	
6100.00	0.00	82.99	6030.89	87.60	563.20	569.97	0.00	14542723.00	2064945.40	



# Weatherford Drilling Services

## DIRECTIONAL PLAN REPORT



**Weatherford**

<b>Company:</b> Anadarko-Kerr-McGee <b>Field:</b> UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) <b>Site:</b> NBU 922-18K1BS PAD EFKL <b>Well:</b> 18K1BS <b>Wellpath:</b> 1	<b>Date:</b> 10/4/2007 <b>Time:</b> 08:06:32 <b>Page:</b> 4 <b>Co-ordinate(NE) Reference:</b> Site: NBU 922-18K1BS PAD EFKL, Grid Nort <b>Vertical (TVD) Reference:</b> SITE 4914.0 <b>Section (VS) Reference:</b> Well (0.00N,0.00E,81.16Azi) <b>Survey Calculation Method:</b> Minimum Curvature <b>Db:</b> Sybase
---	--

### Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
2700.49	2700.00	9.62	12.25	9 5/8"

### Annotation

MD ft	TVD ft	
500.00	500.00	NUDGE
800.00	799.86	HOLD
860.00	859.78	DROP
1460.00	1459.51	HOLD
2800.49	2800.00	BUILD
3477.64	3467.34	HOLD
4457.53	4404.77	DROP
5586.11	5517.00	HOLD
9889.11	9820.00	PBHL

### Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
5084.67	5017.00	WASATCH		0.00	0.00
7832.11	7763.00	MESAVERDE		0.00	0.00

**Weatherford®****Weatherford Drilling Services**

GeoDec v4.1.130

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Report Date: September 26, 2007

Job Number: \_\_\_\_\_

Customer: ANADARKO-KERR McGEE

Well Name: NBU 922-18K1BS

API Number: \_\_\_\_\_

Rig Name: \_\_\_\_\_

Location: UNITAH COUNTY, UTAH

Block: \_\_\_\_\_

Engineer: R JOYNER

---

Universal Transverse Mercator

Geodetic Latitude / Longitude

System: Zone 12N (114 W to 108 W)

System: Latitude / Longitude

Projection: Transverse Mercator/Gauss Kruger

Projection: Geodetic Latitude and Longitude

Datum: NAD 1927 (NADCON CONUS)

Datum: NAD 1927 (NADCON CONUS)

Ellipsoid: Clarke 1866

Ellipsoid: Clarke 1866

North/South 14542635.400 USFT

Latitude 40 2 8.3841996 DMS

East/West 2064382.200 USFT

Longitude -109 29 7.4227840 DMS

Grid Convergence: .97448353°

Total Correction: +10.5945°

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Geodetic Location WGS84

Elevation = 1493.0 Meters

Latitude = 40.03566° N 40° 2 min 8.384 sec

Longitude = 109.48540° W 109° 29 min 7.423 sec

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Magnetic Declination = +11.5690° [True North Offset]

Local Gravity = .9995 g

Local Field Strength= 52728 nT

Mag Vector X = 20993 nT

Dip = 66.0210°

Mag Vector Y = 4297 nT

Model File: bggm2006

Mag Vector Z = 48177 nT

Spud Date: Sep 26, 2007

Mag Vector H = 21428 nT

---

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

NBU 922-18K1BS  
NE/SW SEC. 18, T9S, R22E  
UINTAH COUNTY, UTAH  
UTU-0359

ONSHORE ORDER NO. 1

***MULTI-POINT SURFACE USE & OPERATIONS PLAN***

1. **Existing Roads:**

Refer to the attached location directions.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

2. **Planned Access Roads:**

*Please see the Natural Buttes Unit Standard Operating Procedure (SOP).*

Approximately 0.15 +/- miles of access road is proposed. Please refer to the attached Topo Map B.

3. **Location of Existing Wells Within a 1-Mile Radius:**

Please refer to Topo Map C.

4. **Location of Existing & Proposed Facilities:**

*Please see the Natural Buttes Unit SOP.*

Approximately 3394' +/- of 10" steel pipeline is proposed from the location to an existing pipeline. Refer to the attached Topo Map D.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Carlsbad Canyon Brown (2.5Y 6/2), a non-reflective earthtone.

5. **Location and Type of Water Supply:**

*Please see the Natural Buttes SOP.*

6. **Source of Construction Materials:**

*Please see the Natural Buttes SOP.*

7. **Methods of Handling Waste Materials:**

*Please see the Natural Buttes SOP.*

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E (*Request is in lieu of filing Form 3160-5, after initial production*).



8. **Ancillary Facilities:**

*Please see the Natural Buttes SOP.*

9. **Well Site Layout:** (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

Culverts will be installed where needed.

A run off diversion for drainage will be constructed where needed.

The reserve pit will be lined. When the reserve pit is closed the pit liner will be buried below plow depth.

Location size may change prior to the drilling of the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling rig. The location will be re-surveyed and a form 3160-5 will be submitted.

10. **Plans for Reclamation of the Surface:**

*Please see the Natural Buttes SOP.*

11. **Surface Ownership:**

The well pad and access road are located on lands owned by:

Ute Indian Tribe  
P.O. Box 70  
Fort Duchesne, Utah 84026  
(435) 722-5141

12. **Other Information:**

A Class III Archaeological Survey Report has been conducted for this location and submitted to the Ute Indian Tribe prior to the on-site inspection.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within boundaries of the unit.

**13. Lessee's or Operator's Representative & Certification:**

Sheila Uphego  
Senior Land Admin Specialist  
Kerr-McGee Oil & Gas Onshore LP  
1368 South 1200 East  
Vernal, UT 84078  
(435) 781-7024

Randy Bayne  
Drilling Manager  
Kerr-McGee Oil & Gas Onshore LP  
1368 South 1200 East  
Vernal, UT 84078  
(435) 781-7018

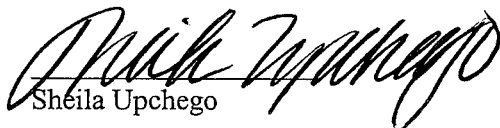
Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under the terms and conditions of the lease for the operations conducted upon leased lands.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Indian Affairs Nationwide Bond #RLB0005239, Bureau of Land Management Nationwide Bond #WYB000291 and State of Utah Bond #RLB0005237.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

  
Sheila Uphego

11/7/2007

Date

Kerr-McGee Oil & Gas Onshore LP  
NBU #922-18K2,K2DS, K1BS, E3CS, E3S, K2BS,  
F4CS, & F4BS  
SECTION 18, T9S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 6.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN EASTERLY DIRECTION APPROXIMATELY 5.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN LEFT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 3.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 1.6 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN LEFT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.1 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR THE #922-18E2 TO THE SOUTHEAST; FOLLOW ROAD FLAGS IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 150' TO THE PROPOSED #922-18E2 AND THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTHEAST; FOLLOW ROAD FLAGS IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 0.15 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 49.75 MILES.

# Kerr-McGee Oil & Gas Onshore LP

NBU #922-18K2, K2DS, K1BS, E3CS, E3S, K2BS, F4CS, & F4BS  
LOCATED IN UINTAH COUNTY, UTAH  
SECTION 18, T9S, R22E, S.L.B.&M.

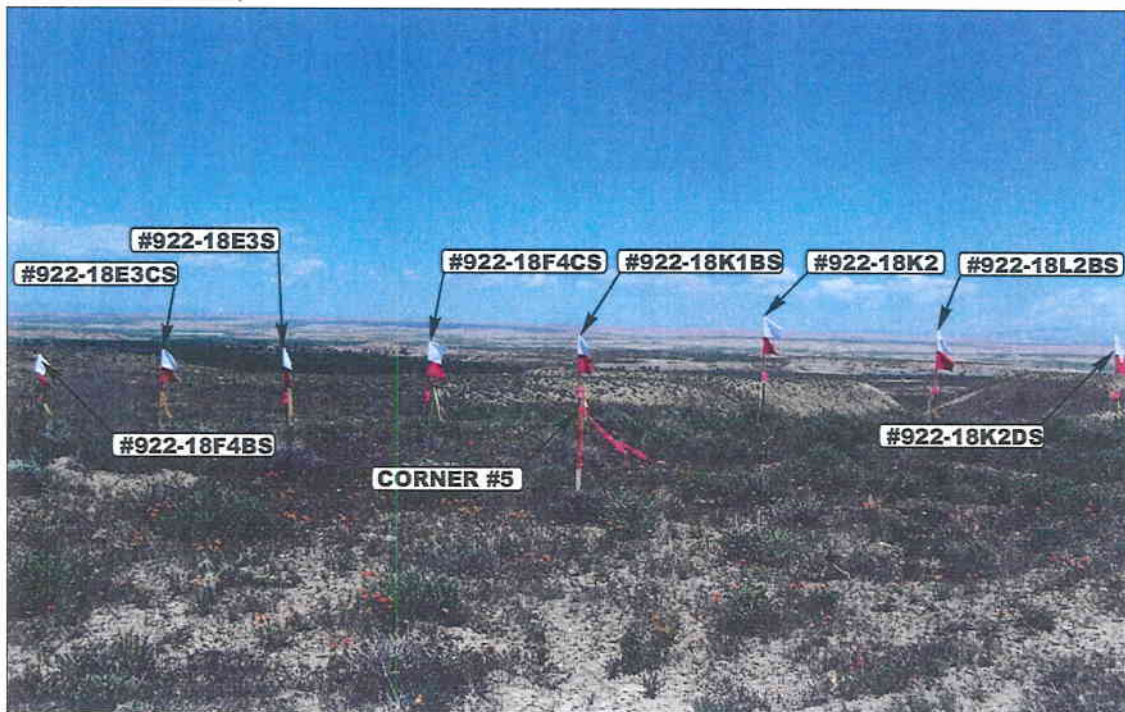


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES

CAMERA ANGLE: NORTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHEASTERLY



- Since 1964 -

**UELS** Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

## LOCATION PHOTOS

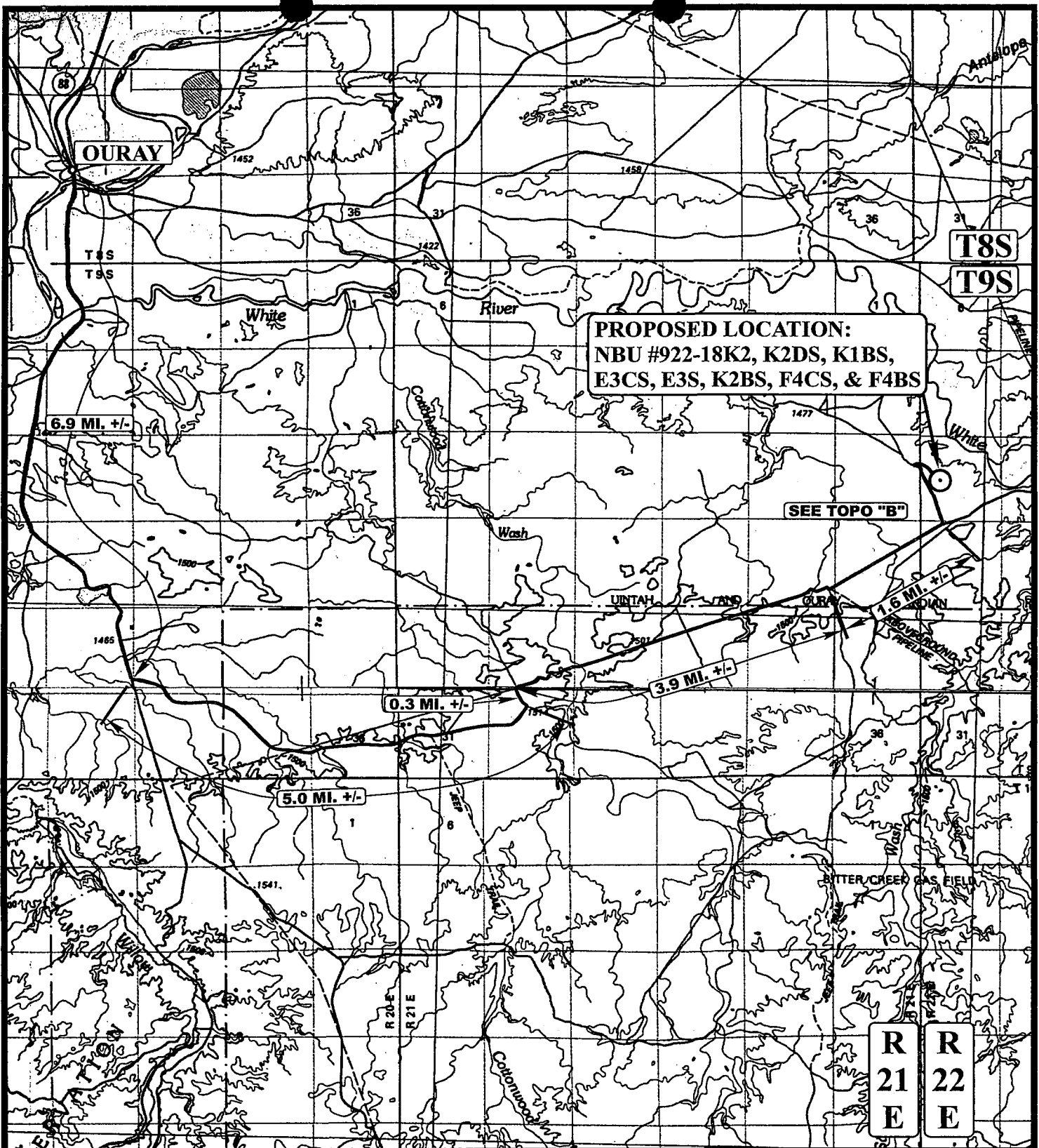
**05 16 07**  
MONTH DAY YEAR

PHOTO

TAKEN BY: L.K.

DRAWN BY: B.C.

REVISED: 00-00-00



**PROPOSED LOCATION:**  
 NBU #922-18K2, K2DS, K1BS,  
 E3CS, E3S, K2BS, F4CS, & F4BS

SEE TOPO "B"

**Kerr-McGee Oil & Gas Onshore LP**

**LEGEND:**

○ PROPOSED LOCATION



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



NBU #922-18K2, K2DS, K1BS, E3CS,  
 E3S, K2BS, F4CS, & F4BS  
 SECTION 18, T9S, R22E, S.L.B.&M.  
 NE 1/4 SW 1/4

**TOPOGRAPHIC MAP**

**05 16 07**  
 MONTH DAY YEAR

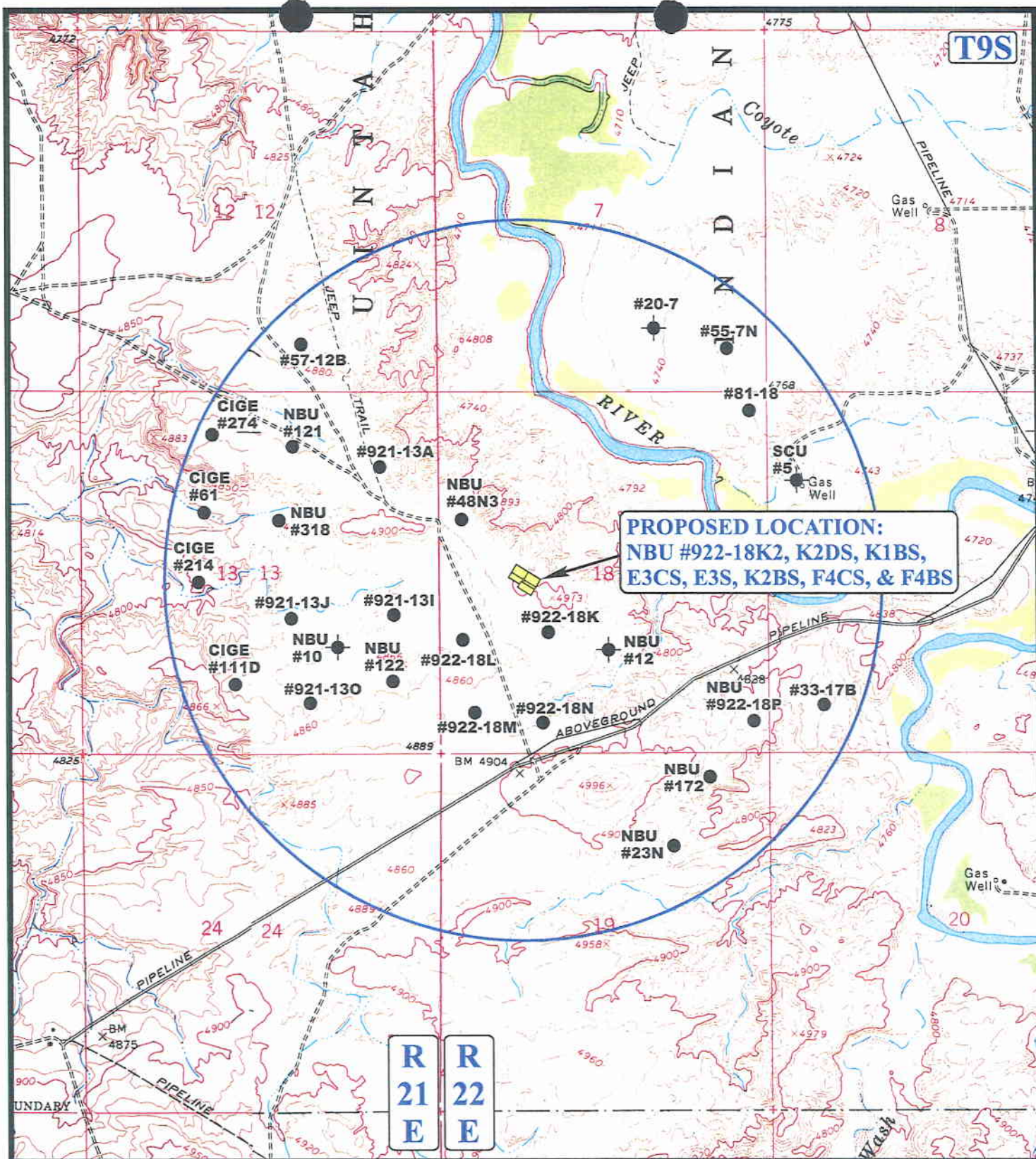
SCALE: 1:100,000 DRAWN BY: B.C. REVISED: 00-00-00











### LEGEND:

- |                 |                       |
|-----------------|-----------------------|
| DISPOSAL WELLS  | WATER WELLS           |
| PRODUCING WELLS | ABANDONED WELLS       |
| SHUT IN WELLS   | TEMPORARILY ABANDONED |



### Kerr-McGee Oil & Gas Onshore LP

NBU #922-18K2, K2DS, K1BS, E3CS,  
 E3S, K2BS, F4CS, & F4BS  
 SECTION 18, T9S, R22E, S.L.B.&M.  
 NE 1/4 SW 1/4



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

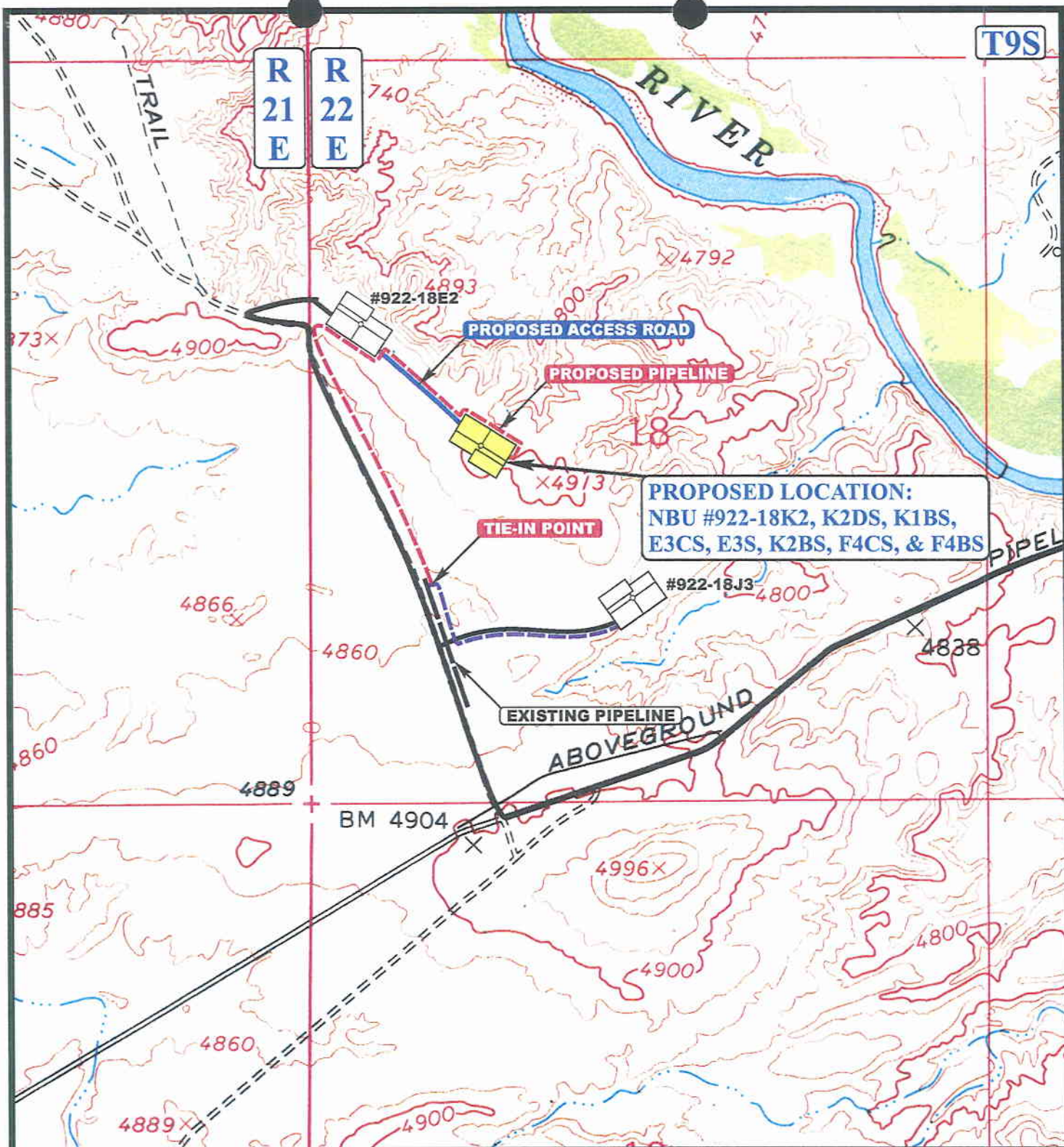
**TOPOGRAPHIC  
 MAP**

**05 16 07**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: B.C. REVISED: 00-00-00







**APPROXIMATE TOTAL 10" PIPELINE DISTANCE = 3,394' +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE
- - - - PROPOSED PIPELINE (SERVICING OTHER WELLS)

**Kerr-McGee Oil & Gas Onshore LP**

NBU #922-18K2, K2DS, K1BS, E3CS,  
E3S, K2BS, F4CS, & F4BS  
SECTION 18, T9S, R22E, S.L.B.&M.  
NE 1/4 SW 1/4



**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



**TOPOGRAPHIC  
MAP**

**05 16 07**  
MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: B.C. REVISED: 10-23-07C.P.

**D  
TOPO**



**Kerr-McGee Oil & Gas Onshore LP**  
**NBU #922-18K2, K2DS, K1BS, E3CS, E3S, K2BS, F4CS, & F4BS**  
**PIPELINE ALIGNMENT**  
**LOCATED IN UINTAH COUNTY, UTAH**  
**SECTION 18, T9S, R22E, S.L.B.&M.**



**PHOTO: VIEW OF TIE-IN POINT**

**CAMERA ANGLE: SOUTHEASTERLY**



**PHOTO: VIEW OF PIPELINE ALIGNMENT**

**CAMERA ANGLE: SOUTHEASTERLY**



- Since 1964 -

**UELS** Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

**PIPELINE PHOTOS**

**05 16 07**  
MONTH DAY YEAR

**PHOTO**

TAKEN BY: L.K.

DRAWN BY: B.C.

REVISED: 00-00-00

SITE PLAN LAYOUT FOR

*Proposed Access Road*

[illegible]

**UINTAH ENGINEERING & LAND SURVEYING**  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

# Kerr-McGee Oil & Gas Onshore LP

## TYPICAL CROSS SECTIONS FOR

NBU #922-18K2, K2DS, K1BS, E3CS, E3S, K2BS, F4CS, & F4BS

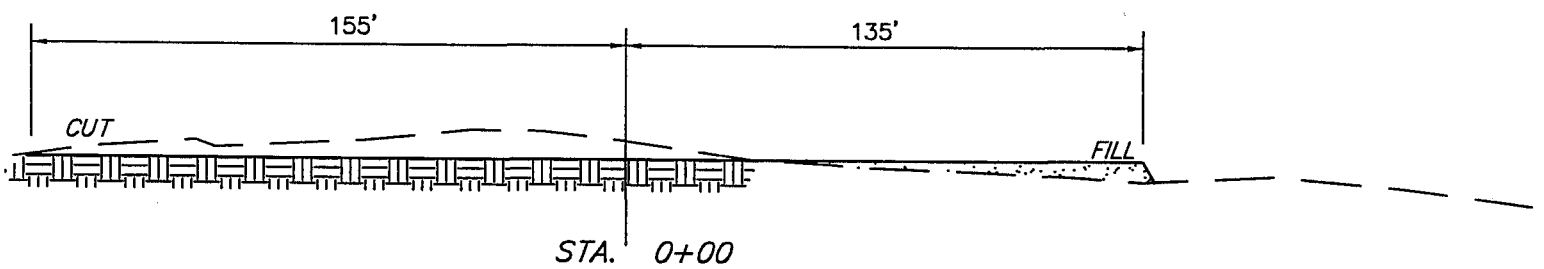
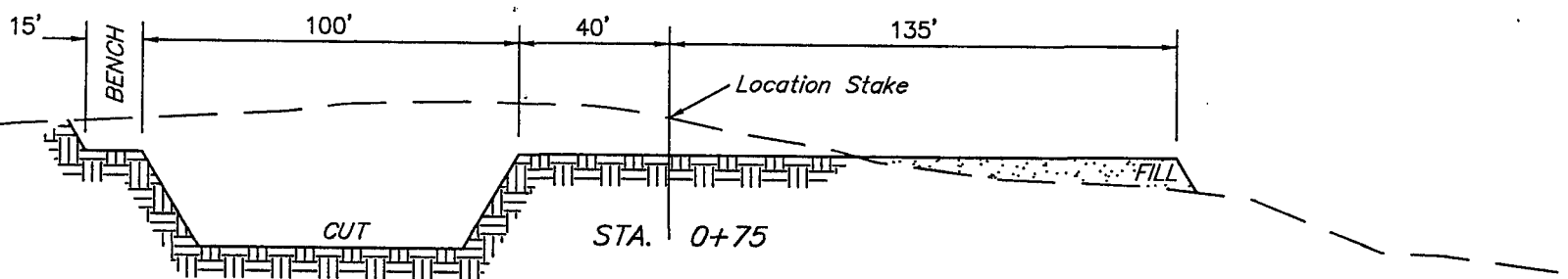
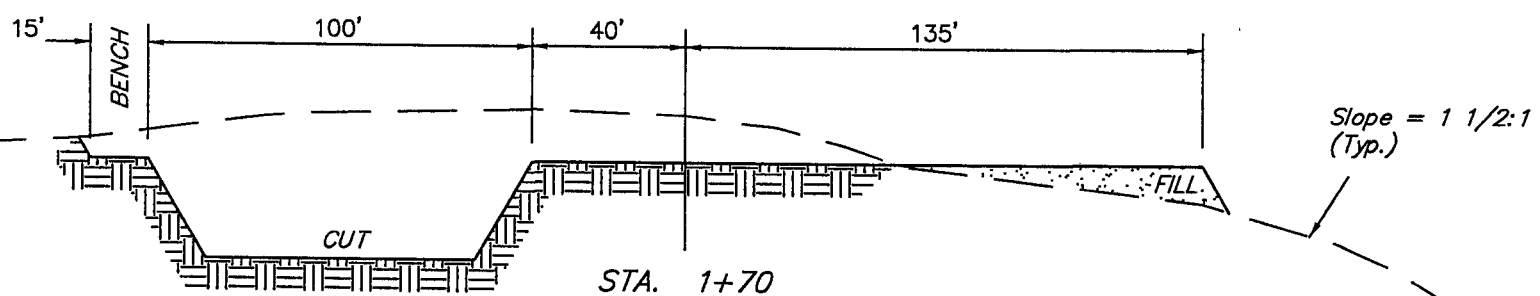
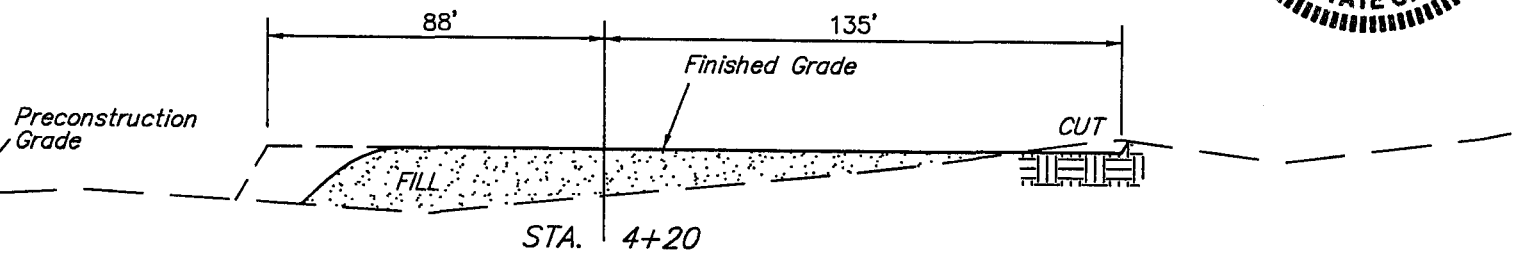
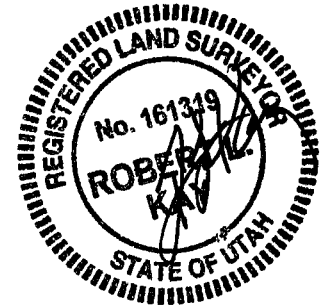
SECTION 18, T9S, R22E, S.L.B.&M.

NE 1/4 SW 1/4

FIGURE #2

1" = 20'  
X-Section  
Scale  
1" = 50'

DATE: 05-22-07  
Drawn By: C.H.



### NOTE:

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

### \* NOTE:

FILL QUANTITY INCLUDES 5% FOR COMPACTION

### APPROXIMATE YARDAGES

CUT  
(12") Topsoil Stripping = 4,490 Cu. Yds.  
Remaining Location = 11,170 Cu. Yds.  
  
TOTAL CUT = 15,660 CU.YDS.  
FILL = 7,940 CU.YDS.

EXCESS MATERIAL = 7,720 Cu. Yds.  
Topsoil & Pit Backfill = 7,720 Cu. Yds.  
(1/2 Pit Vol.)  
EXCESS UNBALANCE = 0 Cu. Yds.  
(After Interim Rehabilitation)

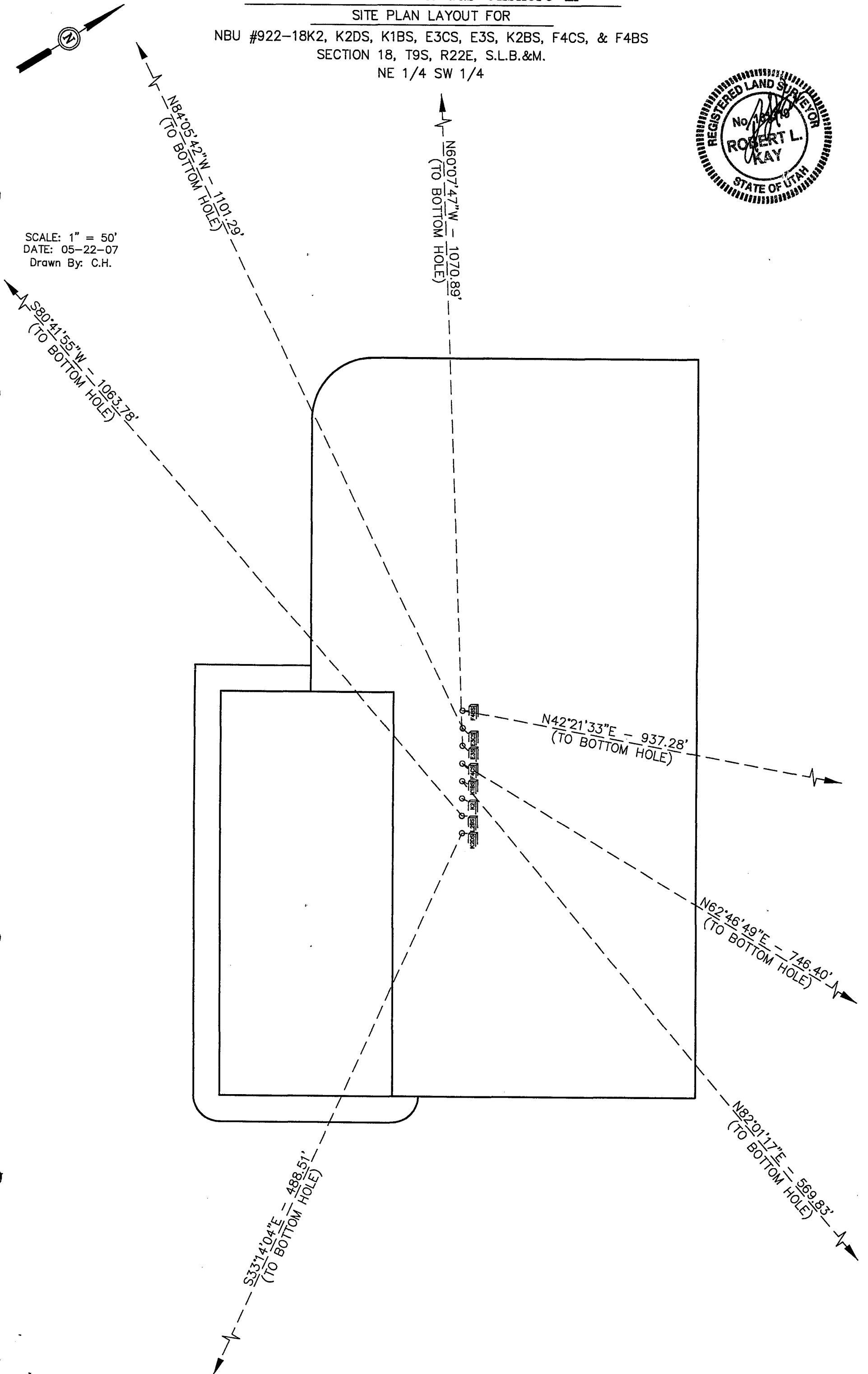
Kerr-McGee Oil & Gas Onshore LP

SITE PLAN LAYOUT FOR

NBU #922-18K2, K2DS, K1BS, E3CS, E3S, K2BS, F4CS, & F4BS  
SECTION 18, T9S, R22E, S.L.B.&M.  
NE 1/4 SW 1/4



SCALE: 1" = 50'  
DATE: 05-22-07  
Drawn By: C.H.



STIPULATIONS: 1- Cedar (Approved)  
2- OIL SHALE





# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:  
3160  
(UT-922)

November 30, 2007

### Memorandum

To: Assistant District Manager Minerals, Vernal District  
From: Michael Coulthard, Petroleum Engineer  
Subject: 2007 Plan of Development Natural Buttes Unit  
Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2007 within the Natural Buttes Unit, Uintah County, Utah.

API#	WELL NAME	LOCATION
(Proposed PZ Wasatch/MesaVerde)		
43-047-39821	NBU 922-18F4CS Sec 18	T09S R22E 2529 FSL 1248 FWL
	BHL Sec 18	T09S R22E 2406 FNL 1895 FWL
43-047-39822	NBU 922-18K2DS Sec 18	T09S R22E 2508 FSL 1282 FWL
	BHL Sec 18	T09S R22E 2099 FSL 1548 FWL
43-047-39823	NBU 922-18E3CS Sec 18	T09S R22E 2540 FSL 1231 FWL
	BHL Sec 18	T09S R22E 2632 FSL 0136 FWL
43-047-39824	NBU 922-18K1BS Sec 18	T09S R22E 2524 FSL 1256 FWL
	BHL Sec 18	T09S R22E 2602 FSL 1821 FWL
43-047-39825	NBU 922-18M3S Sec 18	T09S R22E 1688 FSL 0334 FWL
	BHL Sec 18	T09S R22E 0203 FSL 0571 FWL
43-047-39826	NBU 922-18L3S Sec 18	T09S R22E 1689 FSL 0274 FWL
	BHL Sec 18	T09S R22E 1390 FSL 0214 FWL
43-047-39827	NBU 922-18L2CS Sec 18	T09S R22E 1687 FSL 0344 FWL
	BHL Sec 18	T09S R22E 1994 FSL 0262 FWL

43-047-39828 NBU 922-18M2S Sec 18 T09S R22E 1689 FSL 0284 FWL  
BHL Sec 18 T09S R22E 1075 FSL 0232 FWL

43-047-39829 NBU 922-18P3S Sec 18 T09S R22E 1424 FSL 2605 FEL  
BHL Sec 18 T09S R22E 0203 FSL 0668 FEL

43-047-39830 NBU 922-18P2S Sec 18 T09S R22E 1436 FSL 2588 FEL  
BHL Sec 18 T09S R22E 0988 FSL 0745 FEL

43-047-39831 NBU 922-18N2S Sec 18 T09S R22E 1402 FSL 2637 FEL  
BHL Sec 18 T09S R22E 1278 FSL 1753 FWL

43-047-39832 NBU 922-18O3DS Sec 18 T09S R22E 1407 FSL 2629 FEL  
BHL Sec 18 T09S R22E 0165 FSL 2024 FEL

43-047-39833 NBU 922-18O3AS Sec 18 T09S R22E 1413 FSL 2621 FEL  
BHL Sec 18 T09S R22E 0465 FSL 1965 FEL

43-047-39834 NBU 922-18O1CS Sec 18 T09S R22E 1419 FSL 2613 FEL  
BHL Sec 18 T09S R22E 0687 FSL 1723 FEL

43-047-39835 NBU 922-18O1BS Sec 18 T09S R22E 1430 FSL 2596 FEL  
BHL Sec 18 T09S R22E 1046 FSL 1714 FEL

43-047-39836 NBU 922-18C4BS Sec 18 T09S R22E 1875 FNL 0362 FWL  
BHL Sec 18 T09S R22E 0745 FNL 1878 FWL

43-047-39837 NBU 922-18E2S Sec 18 T09S R22E 1870 FNL 0354 FWL  
BHL Sec 18 T09S R22E 1529 FNL 0503 FWL

43-047-39838 NBU 922-18F1CS Sec 18 T09S R22E 1892 FNL 0387 FWL  
BHL Sec 18 T09S R22E 1724 FNL 1956 FWL

43-047-39839 NBU 922-18N2AS Sec 18 T09S R22E 1396 FSL 2228 FWL  
BHL Sec 18 T09S R22E 1016 FSL 1617 FWL

43-047-39840 NBU 922-18L2BS Sec 18 T09S R22E 2513 FSL 1273 FWL  
BHL Sec 18 T09S R22E 2344 FSL 0223 FWL

43-047-39841 NBU 922-18D3BS Sec 18 T09S R22E 1853 FNL 0329 FWL  
BHL Sec 18 T09S R22E 0877 FNL 0256 FWL

43-047-39842 NBU 922-18J3S Sec 18 T09S R22E 1453 FSL 2564 FEL  
BHL Sec 18 T09S R22E 1888 FSL 2052 FEL

43-047-39843 NBU 922-18J1S Sec 18 T09S R22E 1447 FSL 2572 FEL  
BHL Sec 18 T09S R22E 2062 FSL 1665 FEL



43-047-39844 NBU 922-18I3S Sec 18 T09S R022E 1442 FSL 2580 FEL  
BHL Sec 18 T09S R022E 1346 FSL 0726 FEL

43-047-39845 NBU 922-18C4CS Sec 18 T09S R22E 1881 FNL 0370 FWL  
BHL Sec 18 T09S R22E 1075 FNL 1849 FWL

43-047-39846 NBU 922-18F1BS Sec 18 T09S R22E 1886 FNL 0379 FWL  
BHL Sec 18 T09S R22E 1375 FNL 1868 FWL

43-047-39847 NBU 922-18N2CS Sec 18 T09S R22E 1390 FSL 2220 FWL  
BHL Sec 18 T09S R22E 0775 FSL 1462 FWL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File - Natural Buttes Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:11-30-07



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil Gas and Mining

JOHN R. BAZA  
Division Director

December 3, 2007

Kerr McKee Oil and Gas Onshore LP  
1368 South 1200 East  
Vernal, UT 84078

Re: NBU 922-18K1BS Well, Surface Location 2524' FSL, 1256' FWL, NE SW, Sec. 18,  
T. 9 South, R. 22 East, Bottom Location 2602' FSL, 1821' FWL, NE SW, Sec. 18,  
T. 9 South, R. 22 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-39824.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
Bureau of Land Management, Vernal Office

Operator: Kerr McKee Oil and Gas Onshore LP  
Well Name & Number NBU 922-18K1BS  
API Number: 43-047-39824  
Lease: UTU-0359

Surface Location: NE SW      Sec. 18      T. 9 South      R. 22 East  
Bottom Location: NE SW      Sec. 18      T. 9 South      R. 22 East

### Conditions of Approval

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### 2. Notification Requirements

Notify the Division with 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dustin Doucet at (801) 538-5281 office      (801) 733-0983 home

#### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

6. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.

# RECEIVED

NOV - 7 2007

FORM APPROVED  
OMB No. 1004-0136

Expires November 7, 2000

**BLM**

Form 3160-3  
(August 1999)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

2007 NOV 19 AM 10:25

BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER

b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

2. Name of Operator  
**KERR MCGEE OIL AND GAS ONSHORE LP**

3A. Address  
**1368 SOUTH 1200 EAST VERNAL, UT 84078**

3b. Phone No. (include area code)  
**(435) 781-7024**

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)

At surface **NE/SW 2524'FSL, 1256'FWL**

At proposed prod. Zone **NE/SW 2602'FSL, 1821'FWL**

14. Distance in miles and direction from nearest town or post office\*  
**27.95 +/- MILES FROM OURAY, UTAH**

15. Distance from proposed\* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)  
**1256'**

16. No. of Acres in lease  
**162.39**

17. Spacing Unit dedicated to this well  
**40.00**

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft.  
**REFER TO TOPO C**

19. Proposed Depth  
**9889'**

20. BLM/BIA Bond No. on file  
**RLB0005239**

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
**4899'GL**

22. Approximate date work will start\*  
**UPON APPROVAL**

23. Estimated duration  
**TO BE DETERMINED**

### 24. Attachments

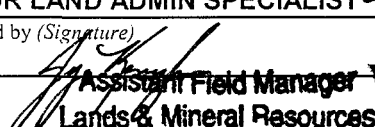
The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

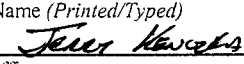
- |   |   |
|---|---|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).   |
| 2. A Drilling Plan.   | 5. Operator certification.  |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized office. |

25. Signature   
Title  
**SENIOR LAND ADMIN SPECIALIST**

Name (Printed/Typed)  
**SHEILA UPCHEGO**

Date  
**11/16/2007**

Approved by (Signature)   
Title  
**Assistant Field Manager  
Lands & Mineral Resources**

Name (Printed/Typed)  
  
Office  
**VERNAL FIELD OFFICE**

**SEP 08 2008**

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached. **CONDITIONS OF APPROVAL ATTACHED**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

**NOTICE OF APPROVAL**

**RECEIVED**

**SEP 16 2008**

**DIV. OF OIL, GAS & MINING**

**UDOGM**

No Nos

08 MIC 0088A

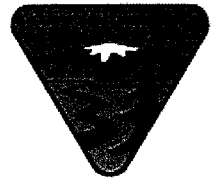


UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

**Company:** Kerr-McGee Oil & Gas Onshore, LP      **Location:** NESW, Sec. 18, T9S, R22E (S)  
NESW, Sec. 18, T9S, R22E (B)  
**Well No:** NBU 922-18K1BS      **Lease No:** UTU-0359  
**API No:** 43-047-39824      **Agreement:** Natural Buttes Unit

Title	Name	Office Phone Number	Cell Phone Number
Petroleum Engineer:	Matt Baker	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	Michael Lee	(435) 781-4432	(435) 828-7875
Petroleum Engineer:	James Ashley	(435) 781-4470	(435) 828-7874
Petroleum Engineer:	Ryan Angus	(435) 781-4430	(435) 828-7368
Supervisory Petroleum Technician:	Jamie Sparger	(435) 781-4502	(435) 828-3913
Supervisory NRS:	Karl Wright	(435) 781-4484	(435) 828-7381
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	(435) 828-3544
NRS/Enviro Scientist:	James Hereford	(435) 781-3412	
NRS/Enviro Scientist:	Chuck Macdonald	(435) 781-4441	(435) 828-7481
NRS/Enviro Scientist:	Dan Emmett	(435) 781-3414	
NRS/Enviro Scientist:	Paul Percival	(435) 781-4493	
NRS/Enviro Scientist:	Michael Cutler	(435) 781-3401	(435) 828-3546
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	(435) 828-3548
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	(435) 828-3547
NRS/Enviro Scientist:	Darren Williams	(435) 781-4447	(435) 828-4029
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	(435) 828-3545

**Fax: (435) 781-3420**

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Construction Activity	-	The Ute Tribe Energy & Minerals Dept. shall be notified in writing 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion	-	Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

***SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)***

***Surface COAs:***

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

**SITE SPECIFIC COAs:**

**Additional Stipulations:**

- Paint equipment Carlsbad Canyon.
- Contrary to paleo report – the moving of paleo effects is not authorized, per Tribal C.P.O.

**General Conditions of Approval**

- A 30' foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- A qualified Archaeologist accompanied by a Tribal Technician will monitor trenching construction of pipeline.
- The Ute Tribe Energy & Minerals Department is to be notified, in writing 48 hours prior to construction of pipeline.
- Construction Notice shall be given to the department on the Ute Tribe workdays, which are Monday through Thursday. The Company understands that they may be responsible for costs incurred by the Ute Tribe after hours.
- The Company shall inform contractors to maintain construction of pipelines within the approved ROW's.
- The Company shall assure the Ute Tribe that "ALL CONTRACTORS, INCLUDING SUB-CONTRACTORS, LEASING CONTRACTORS, AND ETC." have acquired a current and valid Ute Tribal Business License and have "Access Permits" prior to construction, and will have these permits in all vehicles at all times.
- You are hereby notified that working under the "umbrella" of a company does not allow you to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax Ordinance.

- Any deviation of submitted APD's and ROW applications the Companies will notify the Ute Tribe and BIA in writing and will receive written authorization of any such change with appropriate authorization.
- The Company will implement "Safety and Emergency Plan." The Company's safety director will ensure its compliance.
- All Company employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's and/or ROW permits/authorizations on their person(s) during all phases of construction.
- All vehicular traffic, personnel movement, construction/restoration operations shall be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.
- All personnel shall refrain from collecting artifacts, any paleontological fossils, and from disturbing any significant cultural resources in the area.
- The personnel from the Ute Tribe Energy & Minerals Department shall be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.
- All mitigative stipulations contained in the Bureau of Indian Affairs Site Specific Environmental Assessment (EA) will be strictly adhered.

**Upon completion of Application for Corridor Right-Way, the company will notify the Ute Tribe Energy & Minerals Department, so that a Tribal Technician can verify Affidavit of Completion.**

***DOWNHOLE CONDITIONS OF APPROVAL ( COAs)***

**SITE SPECIFIC DOWNHOLE COAs:**

1. A mist system is approved in lieu of deduster equipment. All other equipment for air/gas drilling shall meet specifications in Onshore Order #2, III.Requirements, E. Special Drilling Operations.
2. A formation integrity test shall be performed at the surface casing shoe before drilling more than twenty feet.
3. Logging program: Gamma Ray shall be run from TD to surface.
4. The conductor pipe shall be set and cemented in a competent formation.

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.



- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- Chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

## **OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (1/4 1/4, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.

- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.
- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

## DIVISION OF OIL, GAS AND MINING

### *SPUDDING INFORMATION*

Name of Company: KERR-McGEE OIL & GAS ONSHORE, L.P.

Well Name: NBU 922-18K1BS

Api No: 43-047-39824 Lease Type: FEDERAL

Section 18 Township 09S Range 22E County UINTAH

Drilling Contractor PETE MARTIN DRLG RIG # BUCKET

### **SPUDDED:**

Date 10/31/08

Time

How DRY

***Drilling will Commence:***

Reported by LEW WELDON

Telephone # (435) 828-7035

Date 11/03/08 Signed CHD

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 6

**ENTITY ACTION FORM**

Operator: KERR McGEE OIL & GAS ONSHORE LP Operator Account Number: N 2995  
Address: 1368 SOUTH 1200 EAST  
city VERNAL  
state UT zip 84078 Phone Number: (435) 781-7024

**Well 1**

API Number	Well Name	QQ	Sec	Twp	Rng	County
4304739823	NBU 922-18E3CS	NESW	18	9S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date		
<u>B</u>	99999	<u>2900</u>	11/1/2008	<u>11/10/08</u>		
<b>Comments:</b> MIRU PETE MARTIN BUCKET RIG. <u>WSMVD</u> SPUD WELL LOCATION ON 11/1/2008 AT 1400 HRS. <u>BHL = SWNW</u>						

**Well 2**

API Number	Well Name	QQ	Sec	Twp	Rng	County
4304739824	NBU 922-18K1BS	NESW	18	9S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date		
<u>B</u>	99999	<u>2900</u>	10/31/2008	<u>11/10/08</u>		
<b>Comments:</b> MIRU PETE MARTIN BUCKET RIG. <u>WSMVD</u> SPUD WELL LOCATION ON 10/31/2008 AT 1330 HRS. <u>BHL = NESW</u>						

**Well 3**

API Number	Well Name	QQ	Sec	Twp	Rng	County
4304739805	NBU 922-18F4BS	NESW	18	9S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date	Entity Assignment Effective Date		
<u>B</u>	99999	<u>2900</u>	10/31/2008	<u>11/10/08</u>		
<b>Comments:</b> MIRU PETE MARTIN BUCKET RIG. <u>WSMVD</u> SPUD WELL LOCATION ON 10/31/2008 AT 1330 HRS. <u>BHL = SENW</u>						

**ACTION CODES:**

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

SHEILA UPCHEGO

Name (Please Print)

Sheila Upchego

Signature

REGULATORY ANALYST

Title

11/3/2008

Date

(5/2000)

RECEIVED

NOV 03 2008

DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

FORM APPROVED  
OMB No. 1004-0135  
Expires November 30, 2000

5. Lease Serial No.

UTU-0359

6. If Indian, Allottee or Tribe Name

TRIBAL SURFACE

7. If Unit or CA/Agreement, Name and/or No.

891008900A

8. Well Name and No.

NBU 922-18K1BS

9. API Well No.

4304739824

10. Field and Pool, or Exploratory Area

NATURAL BUTTES

11. County or Parish, State

UINTAH COUNTY, UTAH

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

KERR-McGEE OIL & GAS ONSHORE LP

3a. Address

1368 SOUTH 1200 EAST VERNAL, UT 84078

3b. Phone No. (include area code)

(435) 781-7024

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2524' FSL, 1256' FWL

NE/SW, SEC.18, T9S-R22E

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other WELL SPUD
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX.

SPUD WELL LOCATION ON 10/31/2008 AT 1330 HRS.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

SHEILA UPCHEGO

Title

REGULATORY ANALYST

Signature

Date

November 3, 2008

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

RECEIVED

NOV 04 2008

DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.  
UTU-0359

6. If Indian, Allottee or Tribe Name

TRIBAL SURFACE

**SUBMIT IN TRIPLICATE** – Other instructions on page 2.

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator  
KERR MCGEE OIL & GAS ONSHORE LP

3a. Address  
1368 SOUTH 1200 EAST VERNAL, UTAH 84078

3b. Phone No. (include area code)  
435.781.7024

7. If Unit of CA/Agreement, Name and/or No.  
UNIT #891008900A

8. Well Name and No.  
NBU 922-18K1BS

9. API Well No.  
4304739824

10. Field and Pool or Exploratory Area  
NATURAL BUTTES

4. Location of Well (Footage, Sec., T. R. M., or Survey Description)  
SURFACE HOLE: NE/SW SEC. 18, T9S, R22E 2524'FSL, 1256'FWL  
BOTTOM HOLE: NE/SW SEC. 18, T9S, R22E 2602'FSL, 1821'FWL

11. Country or Parish, State  
UINTAH COUNTY, UTAH

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other SET SURFACE
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	CSG
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

MIRU H&P 298 RIG ON 12/29/2008. DRILLED 12 1/4" SURFACE HOLE TO 2840'. RAN 9 5/8" 40# J-55 SURFACE CSG. LEAD CMT W/300 SX PREM LITE II @11.0 PPG 3.38 YIELD. TAILED CMT W/200 SX PREM CLASS G @15.8 PPG 1.15 YIELD. PUMPED 211 BBL DISPLACEMENT BUMPED PLUG WITH 600 PSI FLOAT EQUIPMENT HELD. GOT 8 BBL OF CMT TO SURFACE. CMT DROPPED OUT OF SIGHT. RAN 260' OF 3/4" PIPE CMT PUMPED 20.5 BBL. CMT W/100 SX PREM CLASS G @15.8 PPG 1.15 YIELD. AND GOT BACK CMT TO SURFACE. WOC, FELL BACK OUT OF SIGHT. RAN 80' OF 3/4" PIPE PUMPED 20.5 BBL CMT W/100 SX PREM CLASS G @15.8 PPG 1.15 YIELD. GOT CMT BACK TO SURFACE FELL 2' AND STAYED THERE. WOC, FELL BACK 2' BELOW FLOWLINE AND STAYED THERE. FLUSH FLOWLINE BLOW DOWN ALL MUD LINES RD CMT EQUIPMENT. L/D LANDING JT AND BAILS AND ELEVATORS L/D MOUSE HOLE UNBOLT AND NIPPLE DOWN DRILLING NIPPLE DUMP AND CLEAN MUD PITS, PUMPS AND ALL MUD LINES.

WORT.

14. I hereby certify that the foregoing is true and correct.

Name (Printed/Typed)  
SHEILA UPCHEGO

Title REGULATORY ANALYST

Signature

Date 01/05/2009

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**RECEIVED**

**JAN 12 2009**

**DIV. OF OIL, GAS & MINING**



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.  
UTU-0359

6. If Indian, Allottee or Tribe Name  
TRIBAL SURFACE

**SUBMIT IN TRIPLICATE – Other instructions on page 2.**

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator  
KERR MCGEE OIL & GAS ONSHORE LP

3a. Address  
1368 SOUTH 1200 EAST VERNAL, UTAH 84078

3b. Phone No. (include area code)  
435.781.7024

7. If Unit of CA/Agreement, Name and/or No.  
UNIT #891008900A

8. Well Name and No.  
NBU 922-18K1BS

9. API Well No.  
4304739824

10. Field and Pool or Exploratory Area  
NATURAL BUTTES

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
SURFACE HOLE: NE/SW SEC. 18, T9S, R22E 2524'FSL, 1256'FWL  
BOTTOM HOLE: NE/SW SEC. 18, T9S, R22E 2602'FSL, 1821'FWL

11. Country or Parish, State  
UINTAH COUNTY, UTAH

**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <b>FINAL DRILLING</b>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<b>OPERATIONS</b>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

FINISHED DRILLING FROM 2840' TO 9880' ON 02/06/2009. RAN 4 1/2" 11.6# I-80 PRODUCTION CSG. LEAD CMT W/442 SX PREM LITE II @11.1 PPG 3.25 YIELD. TAILED CMT W/1290 SX 50/50 POZ @14.3 PPG 1.31 YIELD. WASH PUMP & LINES DROP TOP PLUG DISPLACE W/152.8 BBLS FRESH WATER BUMP PLUG W/3450 PSI 500 OVER DIFF PRESS. FLOATS OK LOST RETURNS START OF DISPLACEMENT NO CMT TO SURFACE L/D LANDING JT & SETTING TOOL SET PACKOFF & TEST TO 5000. NIPPLE DOWN BOPE CLEAN MUD TANKS.

RELEASED H&P 298 RIG ON 02/08/2009 AT 0830 HRS.

14. I hereby certify that the foregoing is true and correct.

Name (Printed/Typed)  
SHEILA UPCHEGO

Title REGULATORY ANALYST

Signature

Date 02/09/2009

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

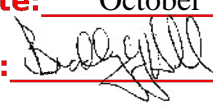
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**RECEIVED**

**FEB 11 2009**

**DIV. OF OIL, GAS & MINING**

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-0359
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> NBU 922-18K1BS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2524 FSL 1256 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 18 Township: 09.0S Range: 22.0E Meridian: S		<b>9. API NUMBER:</b> 43047398240000
<b>PHONE NUMBER:</b> 720 929-6007 Ext		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> Uintah		<b>STATE:</b> UTAH
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	
<input checked="" type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion: 10/15/2009	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION	
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	OTHER: FOOTAGE UPDATE	
<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b>		
THE OPERATOR WISHES TO INFORM ON UPDATED SURFACE FOOTAGE CALLS FOR THIS WELL. THE SURFACE LOCATION UNDERWENT MINOR ADJUSTMENTS DUE TO DRILLING RIG CONFIGURATIONS. THE SURFACE LOCATION CHANGED FROM 2524 FSL & 1256 FWL TO: 2551 FSL & 1214 FWL. PLEASE SEE THE ATTACHED REVISED SURVEY PLAT FOR ADDITIONAL INFORMATION. THE BOTTOM HOLE LOCATION DID NOT CHANGE.		
<b>Approved by the Utah Division of Oil, Gas and Mining</b>  <b>Date:</b> October 19, 2009  <b>By:</b> 		
<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 10/15/2009	

$$\begin{array}{c|c} R & R \\ 21 & 22 \\ \hline E & E \end{array}$$

Marked Stone  
(Not Set), Pile  
of Stones,  
Alum. Cap on  
5/8" Rebar

*Set Marked  
Stone, Rebar,  
Post*

$500^{\circ}02'46''W - 2652.89' (Meas.)$

$N00^{\circ}13'17''W - 2634.84' (Meas.)$

Stone (Not Set),  
5/8" Rebar

Lot 1

Lot 2

Lot 3

Lot 4

18  
NBU #922-18K1BS  
Elev. Ungraded Ground = 4900'

NOTE:  
THE PROPOSED BOTTOM HOLE FOR THIS WELL  
IS LOCATED IN THE NE 1/4 SW 1/4 OF SECTION  
18, T9S, R22E, S.L.B.&M. AT A DISTANCE OF  
2602' FSL 1821' FWL. IT BEARS N85°01'39"E  
608.95' FROM THE PROPOSED WELL HEAD.

S00°03'32"E - 5280.75' (Meas.)

*Set Marked  
Stone, Large  
Pile of Stones*

Uintah County Cap,<sup>N</sup>  
5/8" Rebar, Set  
Marked Stone, Steel  
Post. 3' NWLY

$N89^{\circ}51'59''E - 2229.98'$  (Meas.)

5/8" Rebar,  
Pile of Stones

L = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

<b>NAD 83 (TARGET BOTTOM HOLE)</b>	<b>NAD 83 (SURFACE LOCATION)</b>
LATITUDE = 40°02'09.18" (40.035883)	LATITUDE = 40°02'08.66" (40.035739)
LONGITUDE = 109°29'03.22" (109.484228)	LONGITUDE = 109°29'11.02" (109.486394)
<b>NAD 27 (TARGET BOTTOM HOLE)</b>	<b>NAD 27 (SURFACE LOCATION)</b>
LATITUDE = 40°02'09.31" (40.035919)	LATITUDE = 40°02'08.79" (40.035775)
LONGITUDE = 109°29'00.75" (109.483542)	LONGITUDE = 109°29'08.55" (109.485708)

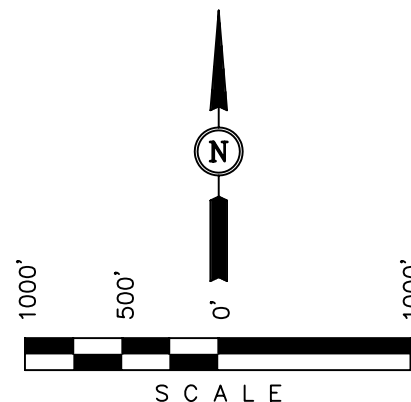
Well location, NBU #922-18K1BS, located as shown in the NE 1/4 SW 1/4 of Section 18, T9S, R22E, S.L.B.&M., Uintah County, Utah.

## BASIS OF ELEVATION

BENCH MARK (20EAM) LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

## BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM  
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY  
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE  
BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

REVISÉD: 10-29-08

UTAH ENGINEERING & LAND SURVEYING  
 85 SOUTH 200 EAST - VERNAL, UTAH 84078  
 (435) 789-1017

SCALE 1" = 1000'		DATE SURVEYED: 05-07-07	DATE DRAWN: 05-21-07
PARTY D.K. L.K. C.H.		REFERENCES G.L.O. PLAT	
WEATHER WARM		FILE Kerr-McGee Oil & Gas Onshore LP	

**RECEIVED** October 15, 2009

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-0359
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> NBU 922-18K1BS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2551 FSL 1214 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 18 Township: 09.0S Range: 22.0E Meridian: S		<b>9. API NUMBER:</b> 43047398240000
<b>PHONE NUMBER:</b> 720 929-6007 Ext		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> Uintah		<b>STATE:</b> UTAH
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> <b>ACIDIZE</b>	
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> <b>ALTER CASING</b>	
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> <b>CASING REPAIR</b>	
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 11/1/2009	<input type="checkbox"/> <b>CHANGE TO PREVIOUS PLANS</b>	
	<input type="checkbox"/> <b>CHANGE WELL STATUS</b>	
	<input type="checkbox"/> <b>CHANGE WELL TYPE</b>	
	<input type="checkbox"/> <b>DEEPEN</b>	
	<input type="checkbox"/> <b>NEW CONSTRUCTION</b>	
	<input type="checkbox"/> <b>OPERATOR CHANGE</b>	
	<input type="checkbox"/> <b>PLUG BACK</b>	
	<input checked="" type="checkbox"/> <b>PRODUCTION START OR RESUME</b>	
	<input type="checkbox"/> <b>RECLAMATION OF WELL SITE</b>	
	<input type="checkbox"/> <b>REPERFORATE CURRENT FORMATION</b>	
	<input type="checkbox"/> <b>SIDETRACK TO REPAIR WELL</b>	
	<input type="checkbox"/> <b>TUBING REPAIR</b>	
	<input type="checkbox"/> <b>VENT OR FLARE</b>	
	<input type="checkbox"/> <b>WATER SHUTOFF</b>	
	<input type="checkbox"/> <b>SI TA STATUS EXTENSION</b>	
	<input type="checkbox"/> <b>WILDCAT WELL DETERMINATION</b>	
	<input type="checkbox"/> <b>OTHER:</b> _____	
<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b> THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 11/01/2009 AT 10:30 A.M. PLEASE REFER TO THE ATTACHED CHRONOLOGICAL WELL HISTORY.		
<b>Accepted by the</b> <b>Utah Division of</b> <b>Oil, Gas and Mining</b> <b>FOR RECORD ONLY</b> November 03, 2009		
<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/3/2009	

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/8/2008

End Date: 2/8/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
12/8/2008	-							
12/29/2008	2:00 - 4:00	2.00	DRLSUR	01	C	S		Prep to skid rig, rig up 2" steam hoses.
	4:00 - 6:00	2.00	DRLSUR	01	C	P		Skid rig to NBU 922-18K1BS
	6:00 - 14:30	8.50	DRLSUR	01	C	P		Heat 16" conductor and 20" conductor, install new "O" ring seal. Rig up both sections of conductor. Rig up flow line to conductor and preacher stand manifold. Install blank flange to preacher stand manifold. Hook up mud line. Install turn buckles and center conductor. Install fill up line and flow line manifold. Install 2" jet line on low line manifold. Transferred mud to pit and circulate over shakers to clean out shale and LCM. Install pipe racks and unload casing.
	14:30 - 21:30	7.00	DRLSUR	01	C	S		It was noticed that the landing sleeve for the DTO well head was not installed. Pickup conductor, install landing sleeve and tack with welder. In the process of doing this the new "O" ring seal was broken, had to wait on new seal. Install conductor, flow line, turn buckles and fill up line. It took 3 hours after "O" ring showed up to get conductor nipples up
	21:30 - 23:00	1.50	DRLSUR	12	A	P		Chage out casing bails for drilling bails
	23:00 - 0:00	1.00	DRLSUR	08	A	S		Inspect saver sub, change out dies and bolts in grabber. Not showed as rig repair on IADC
12/30/2008	0:00 - 0:30	0.50	DRLSUR	08	A	S		Inspect savor sub, change dies and bolts in grabber
	0:30 - 3:30	3.00	DRLSUR	06	A	P		Pickup stand with mud motor, break and change out mud motors
	3:30 - 4:00	0.50	DRLSUR	01	B	P		Pressure test mud line and pump#2 to 3500 psi, pop-off leaking on pump #1
	4:00 - 4:30	0.50	DRLSUR	08	B	S		Change out pop-off on #1 pump
	4:30 - 5:00	0.50	DRLSUR	01	B	P		Pressure test both pumps to 3500 psi for 10 minutes. Blow down mud line
	5:00 - 6:00	1.00	DRLSUR	08	A	S		Change out winch line on driller side
	6:00 - 7:00	1.00	DRLSUR	01	B	S		Prepare to spud. Organized rig floor. Gather slips, collar clamp, thaw and clean tool joint threads. Finish changing out winch line on driller side. Pickup new bit. NOTE THIS SHOULD BE DOWN TIME. IF THEY HAD THERE HEATERS RUNNING AND SUB TARPED IN THIS WOULD NOT HAVE BEEN A PROBLEM
	7:00 - 8:30	1.50	DRLSUR	06	A	P		Make up bit, scribe high side of motor and pickup MWD tools
	8:30 - 9:00	0.50	DRLSUR	08	A	S		Tagged bottom at 111'. break circulation, no returns, flow line frozen
	9:00 - 10:30	1.50	DRLSUR	08	B	S		Thaw out flow line
	10:30 - 14:30	4.00	DRLSUR	02	D	P		Drill 111' - 284', WOB 2 - 10k, GPM 736, Pump #1 SPM 82, Pump #2 SPM 82, RPM 55, Motor RPM 117, SPP On/Off Bottom 1075/875, Torque On/Off Bottom 3/0, Mud Wt 9.9, Visc 37, Footage 173', FPH 43.25
	14:30 - 15:00	0.50	DRLSUR	07	A	P		Rig service
	15:00 - 15:30	0.50	DRLSUR	08	A	S		Repair ST-80 change out clamp/unclamp cable

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# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/8/2008

End Date: 2/8/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/O/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	15:30 - 17:00	1.50	DRLSUR	02	D	P		Drill 284' - 374', WOB 2 - 10k, GPM 736, Pump #1 SPM 82, Pump #2 SPM 82, RPM 55, Motor RPM 117, SPP On/Off Bottom 1160/1075, Torque On/Off Bottom 3/0, Mud Wt 9.9, Visc 37, Footage 90', FPH 60
	17:00 - 17:30	0.50	DRLSUR	23		S		Safety shut down, inspect top drive for missing bolts, found 2 bolts with out keeper pins on bail ears
	17:30 - 18:00	0.50	DRLSUR	08	A	S		Repair ST-80 adjusted cables for forward backward controls
	18:00 - 0:00	6.00	DRLSUR	02	D	P		Drill 284' - 1000', WOB 10-25k, GPM 736, Pump #1 SPM 82, Pump #2 SPM 82, RPM 55, Motor RPM 117, SPP On/Off Bottom 2350/2120, Torque On/Off Bottom 9/3, Mud Wt 9.8, Visc 35, Footage 716', FPH 119.3
								Slide Parameters (111'-131') (286'-311') (374'-398') (567'-582') (747'-760') (834'-859') (1023'-1040') WOB 18k, GPM 736, Pump #1 SPM 82, Pump #2 SPM 82, RPM 0, Motor RPM 117, SPP On/Off Bottom 2350/2120, Torque On/Off Bottom 0/0, Mud Wt 9.8, Visc 35,
12/31/2008	0:00 - 9:30	9.50	DRLSUR	02	D	P		DRILL F/1000'-1871, WOB 10-25k, GPM 736, Pump #1 SPM 82, Pump #2 SPM 82, RPM 55, Motor RPM 117, SPP On/Off Bottom 2350/2120, Torque On/Off Bottom 9/3, Mud Wt 9.8, Visc 35, Footage 871', FPH 91.68
	9:30 - 12:00	2.50	DRLSUR	22	G	X		LOST RETURNS @ 1869' BUILD VOL. PUMP 3 50 BBLS HIGH VIS AND 10% LCM SWEEPS. LOST OVER 300 BBLS.
	12:00 - 0:00	12.00	DRLSUR	02	D	P		WENT BACK TO DRILLING WITH LOWER SPM 72/72 FOR 1 HR. AND REGAINED FULL RETURNS. DRILL F/1871-2790, WOB 10-25k, GPM 738, PUMP #1 SPM 82, PUMP #2 SPM 82, RPM 50-55, MOTOR RPM 112, SPP ON/OFF BOTTOM 2200/1790, TORQUE ON/OFF BTM 9/3, MUD WT 9.1, VIS 34, FTG 919', FPH 76.5 BYPASS SHAKERS FOR LCM, DUMP SANDTRAP EVERY HR.
1/1/2009	0:00 - 1:00	1.00	DRLSUR	02	D	P		DRILL F/2790-2840, WOB 10-25k, GPM 738, PUMP #1 SPM 82, PUMP #2 SPM 82, RPM 50-55, MOTOR RPM 112, SPP ON/OFF BOTTOM 2200/1790, TORQUE ON/OFF BTM 9/3, MUD WT 9.1, VIS 34, FTG 50', FPH 50.0 BYPASS SHAKERS FOR LCM, DUMP SANDTRAP EVERY HR.
	1:00 - 2:00	1.00	DRLSUR	05	C	P		CIRC AND PUMP HIGH VIS AND LCM SWEEP, BUILD AND PUMP SLUG.
	2:00 - 9:00	7.00	DRLSUR	06	A	P		TRIP OUT, L/D DIRECTIONAL TOOLS. THAW OUT RIG FLOOR WHILE TRIPPING TO USE EQUIPMENT TO TRIP. STEAM LINES, MUD LINE AND LINES FREEZING WHILE FILLING HOLE.
	9:00 - 10:30	1.50	DRLSUR	06	A	P		PICK UP BIT, BIT SUB AND TRIP IN WITH 2-8" DC's NO TIGHT SPOTS. 14' OF FILL ON BTM.
	10:30 - 13:30	3.00	DRLSUR	22	G	P		LOST CIRC 15 MINS AFTER PUMPING, BUILD MUD AND PUMP LCM SWEEPS. LOST 300 BBLS OF MUD TO WELL.
	13:30 - 17:00	3.50	DRLSUR	06	D	P		TRIP OUT L/D 2-8" DC'S HELD SAFETY WITH L/D TRUCK TO L/D DC'S.
	17:00 - 19:30	2.50	DRLSUR	12	A	P		CHANGE OUT BAILS AND ELEVATORS AND RIG UP CASING EQUIPMENT.
	19:30 - 20:00	0.50	DRLSUR	07	A	P		CLEAN RIG FLOOR OF ICE.
	20:00 - 0:00	4.00	DRLSUR	12	C	P		RUN 64 JTS. OF 9 5/8, 40#, J-55 LTC
1/2/2009	0:00 - 2:00	2.00	CSG	12	C	P		RUN 64 JTS. OF 9 5/8, 40#, J-55 LTC LAND AND SET CASING AT 2820'

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# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/8/2008

End Date: 2/8/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
1/24/2009	2:00 - 6:30	4.50	CSG	05	D	X		CIRC CASING DRILLING NIPPLE LEAKING FROM ORING SEAL. WORK ON CELLAR PUMPS TO SUCK OUT CELLAR PREPARE TO CMT. CASING HELD SAFETY MTG WITH BJ CEMENT AND PUMPED LEAD 180 BBLS, 300 SKS OF PREMIUM LITE 11.0#, 3.38 YIELD..TAIL 42 BBLS 200 SX, GLASS G, 15.8#, 1.15 YIELD..PUMPED 211 BBL DISPLACEMENT, BUMPED PLUG WITH 600 PSI FLOAT EQUIPMENT HELD. GOT 8 BBLS OF CMT TO SURFACE.. CMT DROPPED OUT OF SIGHT. RAN 260' OF 3/4" PIPE FOR TOP JOB. PUMPED 20.5 BBL, 100SKS CLASS G 15.8# AND GOT CMT BACK TO SURFACE.
	6:30 - 8:30	2.00	CSG	12	E	P		WAIT ON CMT FELL BACK OUT OF SIGHT.
	8:30 - 11:00	2.50	CSG	12	E	P		RAN 80' OF 3/4" PIPE AND PUMPED 20.5 BBL, 100SKS CLASS G 15.8# AND GOT CMT BACK TO SURFACE. FELL 2' AND STAYED THERE.
	11:00 - 13:00	2.00	CSG	13	A	P		WAIT ON CMT FELL BACK 2' BELOW FLOWLINE AND STAYED THERE.
	13:00 - 14:30	1.50	CSG	12	E	P		FLUSH FLOWLINE, BLOW DOWN ALL MUD LINES. RIG DOWN CMT EQUIPMENT.
	14:30 - 15:00	0.50	CSG	13	A	P		L/D LANDING JT. AND BAILS AND ELEVATORS, L/D MOUSE HOLE. UNBOLT AND NIPPLE DOWN DRILLING NIPPLE.
	15:00 - 16:00	1.00	CSG	12	E	P		DUMP AND CLEAN MUD PITS, PUMPS AND ALL MUD LINES. RELEASED RIG AT 23:59 ON 1/2/09
	16:00 - 20:00	4.00	CSG	14	A	P		PREPARE RIG FOR SKIDDING, SKID RIG TO 18K1BS & CENTER UP, RIG UP EQUIPMENT AFTER SKID-STAIRS, CATWALK, V-DOOR
	20:00 - 0:00	4.00	CSG	01	A	P		6 MONTH MAINTENANCE ON RAMS, MP MOTORS, TOP DRIVE, ELECTRICAL SYSTEM, QTRLY INSP ON DRAWWORKS, MONTHLY INSPECTION ON MOTORS
	18:00 - 21:00	3.00	DRLPRO	01	C	P		NIPPLE UP BOPE, INSTALL NEW CHOKE LINE EXTENSION FROM CHOKE HOUSE, INSTALL DRIP PANS, TURNBUCKLES, FUNCTION TEST BOPS
1/25/2009	21:00 - 0:00	3.00	DRLPRO	08	B	P		TEST BOP'S=ANN 250-5 MIN, 2500-10, TEST RAMS, CHOKE LINE, CHOKE MANIFOLD, IBOP, FLOOR VALVE, TOP DRIVE 250/5, 5000/10 MIN
	0:00 - 7:30	7.50	DRLPRO	14	A	P		CHANGE OUT RAISING CYLINDER ON GRABBER OF TOP DRIVE.
	7:30 - 12:00	4.50	DRLPRO	15	A	P		DAILY RIG SERVICE
	12:00 - 15:30	3.50	DRLPRO	08	B	Z		CHANGE OUT DRILLING LINE (COMPLETE) WITH NEW SPOOL OF LINE, SET TWIN STOPS
	15:30 - 16:00	0.50	DRLPRO	07	A	P		M/U BIT #QD506 W/ 6-12, P/U NEW BENT MUD MOTOR 1.11DEG, ORIENT TOOLS, P/U 1-HWDP
	16:00 - 21:00	5.00	DRLPRO	09	A	P		TO TEST MUD MOTOR-TD FAILED
1/26/2009	21:00 - 23:00	2.00	DRLPRO	06	A	P		TD FAILURE IN CONTROL SYSTEMS, UNABLE TO MAKEUP, TROUBLESHOOT FAILURE
	23:00 - 0:00	1.00	DRLPRO	08	B	Z		TROUBLE SHOOT TOP DRIVE PROBLEM, CHANGE CABLES, ENCODER CARD, FOUND LOOSE PINS IN ENCODER PIGTAIL
	0:00 - 15:00	15.00	DRLPRO	08	B	Z		SERVICE RIG, CHANGE OIL IN TOP DRIVE
	15:00 - 15:30	0.50	DRLPRO	07	A	P		FUNCTION TEST MUD MOTOR-OK, TRIP IN HOLE TO 1800', INSTALL ROTATING HEAD RUBBER, TRIP IN TO 2769, TAG CEMENT,
	15:30 - 18:00	2.50	DRLPRO	06	A	P		DRILL CEMENT, PLUG, FLOAT COLLAR, SHOE, CEMENT TO 2840
	18:00 - 20:00	2.00	DRLPRO	02	F	P		

RECEIVED November 03, 2009

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/8/2008

End Date: 2/8/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
1/27/2009	20:00 - 21:30	1.50	DRLPRO	02	D	P		SPUD ACTUAL, DRILL 2840-2881 = 41' = 27.3 FPH TORQUE ON/OFF 4/1.5K, SPP ON/OFF 1250/1175, STRING WT UP/DOWN/ROT , WOB 10, SPM 70,GPM 315, RPM 45, MW 9.6, VIS 30, LCM 0, SLIDE DRILL 2881-2889 = 8' = 4 FPH, SPP 1100, WOB 18-24, SPM 90,GPM 405, RPM 0, MW 9.4, VIS 33, LCM 0,
	21:30 - 23:30	2.00	DRLPRO	02	D	P		ROTARY DRILL 2889-2929 = 40' = 80 FPH, TORQUE ON/OFF 4/1.5K, SPP ON/OFF 1250/1175, STRING WT UP/DOWN/ROT 107/97/105, WOB 10, SPM 70,GPM 315, RPM 45, MW 9.4, VIS 30, LCM 0,
	23:30 - 0:00	0.50	DRLPRO	02	D	P		DRILL 2889-2945 = 56' = 112 FPH, MW 9.5# 34 VIS, SPM 90, GPM 404, SPP ON/OFF 1250/950, DIFF 200, RPM 45, TORQUE ON/OFF 4/2K,
	0:00 - 0:30	0.50	DRLPRO	02	D	P		SLIDE DRILL 2945-2951, MW 9.5# 34 VIS, SPM 90, GPM 404, SPP ON/OFF 1250/95
	0:30 - 2:00	1.50	DRLPRO	02	D	P		ROT DRILL2951-2951 TO WIPE FORMATION, SLIDE 2954-2959 = 5', MW 9.5# VIS 35, SPM 90, GPM 404, SPP 950-1050, WOB 5-??, UNABLE TO SLIDE WITH NORMAL WOB, STRING SLIPS DOWN PUTTING HIGH WOB AND STALLING MOTOR
	2:00 - 3:30	1.50	DRLPRO	02	D	P		ROT DRILL 2959-3039 = 80' = 80 FPH, MW 9.5# VIS 34, WOB 18-22, SPP ON/OFF 1250/975, DIFF 250, GPM 404, SPM 90, RPM 45, TORQUE ON/OFF 4.2/2.5K,
	3:30 - 4:30	1.00	DRLPRO	02	D	P		SLIDE DRILL 3039-3052, 13', WOB 20, DIFF PRESS 175, SPP ON/OFF 1050/980, SPM 90, GPM 404
	4:30 - 6:00	1.50	DRLPRO	02	D	P		DRILL 3052-3071 = 19' MW 9.5#, VIS 35, SPM 90, GPM 404, SPP ON/OFF 1250/950, DIFF 200, RPM 55, TORQUE ON/OFF 6/2K, WOB 18
	6:00 - 6:30	0.50	DRLPRO	02	D	P		SLIDE DRILL 3071-3081, MW 9.5#, VIS 35, SPM 90, GPM 404, DIFF 120, SPP ON/OFF 1180/1060
	6:30 - 7:30	1.00	DRLPRO	02	D	P		ROT DRILL 3081-3134 = 53' = 106 FPH, MW 9.5# VIS 35, SPM 90, GPM 404, SPP ON/OFF 1240/1080, DIFF 250, RPM 55, TORQUE ON/OFF 6/2K, WOB 18
	7:30 - 8:00	0.50	DRLPRO	02	D	P		SLIDE DRILL 3134-3139, MW 9.5#, VIS 35, SPP ON/OFF 1150/1030,
	8:00 - 9:30	1.50	DRLPRO	02	D	P		CIRCULATE HOLE, BUILD SLUG FOR TRIP
	9:30 - 10:00	0.50	DRLPRO	05	C	P		TRIP OUT WITH BIT #1, HOLE GOOD, PULL ROTATING HEAD RUBBER
	10:00 - 12:00	2.00	DRLPRO	06	A	P		L/D MUD MOTOR WITH STABILIZER, L/D IBS, SERVICE RIG
	12:00 - 13:30	1.50	DRLPRO	06	J	P		P/U DIRECTIONAL MOTOR, M/U DIRECTIONAL TOOLS, ORIENT SAME, M/U BIT #1RR,
	13:30 - 14:00	0.50	DRLPRO	07	A	P		TRIP IN HOLE, HOLE GOOD,
	14:00 - 14:30	0.50	DRLPRO	06	J	P		DRILL 3139-3599 = 460' = 61.3 FPH AVG, MW 9.5#, 36 VIS, SPM 90, GPM 404, SLIDE DRILL 3253-3265, 3316-3331, 3347-3355, 3410-3420, 3442-3450, 3502-3512, 3537-3545, TORQUE ON/OFF 3/1K, SPP ON/OFF 1480/1180, WOB 14-16, SPM 90, GPM 404, ROP 25-50,==ROTARY DRILL TORQUE ON/OFF 7.2/2.5K, SPP ON/OFF 1260-1500/1150-1225, ST WT UP/DOWN/ROT 118/105/108
	14:30 - 16:30	2.00	DRLPRO	06	A	P		
	16:30 - 0:00	7.50	DRLPRO	02	D	P		

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# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

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Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

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Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
1/28/2009	0:00 - 16:30	16.50	DRLPRO	02	D	P		DRILL 3599-4449= 850' = 51.5 AVG ROP, MW 9.5#, VIS 36, WOB 18-20, SPM 90, SPP ON/OFF 11780/1560, DIFF 280, RPM 45, GPM 404, TORQUE ON/OFF 8/4K, SLIDE 3599-3511, 3631-3639, 3693-3703, 3725-3733, 3788-3802, 3818-3830, 3881-3894, 3913-3928, 3976-3988, 4007-4019, 4071-4081, 4165-4177, 4197-4205, 4260-4275, 4291-4306, 4354-4369=LOST 80 BBL MUD @ 4185, PUMPED LCM PILLS AND STOPPED LOSSES
	16:30 - 17:00	0.50	DRLPRO	02	D	P		RIG SERVICE
	17:00 - 0:00	7.00	DRLPRO	02	D	P		DRILL 4449-4772 = 323' = 46.1 FPH, MW 9.6#, VIS 38, ROT DRILL WOB 22, RPM 45, SPP ON/OFF 1850/1550, DIFF 250-300, SLIDE 4449-4464, 4607-4627, 4734-4747, WOB 15-25, SPP ON/OFF 1675/1550, DIFF 125, SPM 90, GPM 404, P/U-SO-ROT WT 145-112-131,
1/29/2009	0:00 - 13:30	13.50	DRLPRO	02	D	P		DRILL 4772-5395 = 623' = 46.1 FPH, MW 9.8#, VIS 38, SPM 90, SPP 1550-1800, GPM 404, RPM 55, MOTOR RPM 64, TORQUE ON/OFF 6-8/3-4K, ST WT UP/DN/ROT 153-118-129, WOB 18, SLIDE 4828-4845, 4955-4967, TORQUE ON/OFF 8.5/4K, DIFF 250, WOB 22
	13:30 - 14:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	14:00 - 0:00	10.00	DRLPRO	02	D	P		DRILL 5395-5773 = 378' = 37.8 FPH, WOB 22, RPM 55, TORQUE ON/OFF 8000/4000, SPM 90, GPM 404, MOTOR RPM 64, SPP ON/OFF 1950/1750, P/U-S/O-ROT WT 155-124-135, SLIDE 5407-5499, WOB 25, DIFF 175, MW 9.8#, VIS 41, SPM 90, GPM 404, SPP ON/OFF 1840-1610
1/30/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL 5773-5960 = 187' = 31.2 FPH, MW 9.8#, VIS 38
	6:00 - 7:30	1.50	DRLPRO	05	C	P		CIRCULATE B/U PRIOR TO TRIP, BUILD & PUMP SLUG
	7:30 - 12:30	5.00	DRLPRO	06	A	P		TRIP OUT, DRAG ON BOTTOM 8 STDs = +40-80K, POOH, L/D MUD MOTOR, CHANGE BITS
	12:30 - 16:30	4.00	DRLPRO	06	A	P		M/U NEW Q506 BIT & MOTOR 1.4 BENT SUB, ORIENT MWD TOOLS, TRIP IN HOLE, FILL PIPE @ SHOE, TRIP IN TO 5700, HIT BRIDGE, UNABLE TO PASS, CONNECT TOP DRIVE
	16:30 - 17:30	1.00	DRLPRO	03	E	P		WASH & REAM F/5700-5960, SPM 80, SPP 2000, RPM 20, TORQUE 4000, WOB 0-5, P/U-S/O-ROT 183-78-145
	17:30 - 0:00	6.50	DRLPRO	02	A	P		DRILL 5960-6200, MW 10.0#, VIS 40, WOB 16-18, TORQUE ON/OFF 8/5K, TD RPM 55, MOTOR RPM 64, SPM 90, GPM 404, SPP ON/OFF 2000/1770, DIFF 230, ST WT UP/DN/ROT 168-136-148K, ROP 25-55
1/31/2009	0:00 - 12:00	12.00	DRLPRO	02	D	P		DRILL 6200-6705 = 505' = 42.1 FPH, MW 10.1#, VIS 43, TD RPM 60, TORQUE ON/OFF 10/4K, MOTOR RPM 72, ST WT P/U-S/O-ROT 173-137-149, WOB 18, ROP 35-70, SPM 100, GPM 450, SPP ON/OFF 2400/2190
	12:00 - 12:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	12:30 - 15:30	3.00	DRLPRO	02	D	P		DRILL 6705-6811 = 106' = 35.3 FPH, MW 10.1#, VIS 43, TD RPM 60, TORQUE ON/OFF 10/4K, MOTOR RPM 72, ST WT P/U-S/O-ROT 176-141-155, WOB 18, ROP 25-40, SPM 100, GPM 450, SPP ON/OFF 2220/1970

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# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/8/2008

End Date: 2/8/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/O/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
2/1/2009	15:30 - 16:30	1.00	DRLPRO	02	D	P		SLIDE DRILL 6811-6823 = 12', 12 FPH, MW 10.1#, VIS 43, WOB 20-35, DIFF 125, SPM 100, GPM 450, SPP ON/OFF 1970/2200, MM RPM 71, ST WT UP-DN-ROT 176-141-155
	16:30 - 20:00	3.50	DRLPRO	02	D	P		DRILL 6823-6985 = 162' = 46.3 FPH, MW 10.1#, VIS 49, TD RPM 60, TORQUE ON/OFF 10/7K, MOTOR RPM 72, ST WT P/U-S/O-ROT 176-148-162, WOB 21, ROP 25-40, SPM 100, GPM 450, SPP ON/OFF 2390-2230
	20:00 - 0:00	4.00	DRLPRO	08	B	Z		REPAIR RIG, CHANGE ALL VALVES #1 PUMP, SEATS IN MODS 2 & 3, CHANGE ALL VALVES & SEATS MP #2
	0:00 - 1:30	1.50	DRLPRO	08	B	Z		REPAIR RIG-FINISH CHANGING SEATS & VALVES IN MUD PUMPS
	1:30 - 7:30	6.00	DRLPRO	02	D	P		DRILL 6985-7190 = 205' = 34.2 FPH, MW 10.1# 44 VIS, WOB 22, TORQUE ON/OFF 9-11/8K, SPM 100, GPM 450, SPP ON/OFF 2240/2370, TD RPM 60, MM ROP 72, ST WT UP-DN-ROT 180-145-160, ROP 40-70
	7:30 - 9:30	2.00	DRLPRO	02	D	P		SLIDE DRILL 7190-7208 = 18', MW 10.2@, 43 VIS 43, WOB 21, TORQUE 8/3K, SPM 100, GPM 450, MM RPM 72, SPP ON-OFF 2150-2000, ST WT UP-DN-ROT 180-145-160, ROP 9
	9:30 - 11:30	2.00	DRLPRO	02	D	P		DRILL 7208-7285 = 77' = 38.5 FPH, MW 10.2#, VIS 44, TORQUE ON/OFF 11/8K, SPM 100, GPM 450, SPP ON/OFF 2400/2200, TD RPM 50-60, MM ROP 72, ST WT UP-DN-ROT 180-145-160, ROP 40-70
	11:30 - 12:00	0.50	DRLPRO	07	A	P		SERVICE RIG, CHANGE OUT 5 SHAKER SCREENS
2/2/2009	12:00 - 0:00	12.00	DRLPRO	02	D	P		DRILL 7285-7654 = 369' = 30.75 FPH, MW 10.4#, 47 VIS, WOB 20-22, TORQUE ON/OFF 9-12/8K, TD RPM 40-60, MM RPM 72, SPM 100, GPM 450, SPP ON/OFF 2550/2240, STR WT UP-DN-ROT 185-152-166, ROP 20-60
	0:00 - 16:30	16.50	DRLPRO	02	D	P		DRILL 7654-8136 = 482' = 29.2 FPH, MW 10.5, 43 VIS, WOB 20, TORQUE ON/OFF 12/8, SPM 95, GPM 426, SPP ON/OFF 2180/2020, TD RPM 40-60, MM RPM 68, ROP 30-50=SLIDE 7757-7765, WOB 17, P/U-S/O 184-151-166, SPP ON/OFF 2200/2150
	16:30 - 17:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	17:00 - 0:00	7.00	DRLPRO	02	D	P		DRILL 8136-8325 = 189' = 37.8 FPH, MW 10.5#, VIS 41, WOB 18-20, TORQUE ON/OFF 13/9, SPM 95, GPM 426, SPP ON/OFF 2340/2210, RD RPM 40-60, MM RPM 68, ST WT P/U-S/O-ROT 198-165-180
2/3/2009	0:00 - 10:30	10.50	DRLPRO	02	D	P		DRILL 8385- 8695 = 310' = 29.5 FPH, WOB 18, TORQUE ON/OFF 13/9, TD RPM 60, MM RPM 68, SPM 95, GPM 426, SPP OF/OFF 2340/2210, P/U-S/O-ROT WT 210-165-179, MW 10.6, VIS 45
	10:30 - 11:00	0.50	DRLPRO	02	D	P		SLIDE DRILL 8695-8705 = 10', WOB 18-50, TORQUE 2, SPP ON/OFF 2180/2130, SPM 95, GPM 426, MM RPM 68, MW 10.6# VIS 42
	11:00 - 13:30	2.50	DRLPRO	02	D	P		DRILL 8705-8795 = 90' = 180 FPH, MW 10.6# VIS 44, WOB 18-22, TORQUE ON/OFF 13/9, TD RPM 60, MM RPM 68, SPM 95, GPM 426, SPP OF/OFF 2500/2130, P/U-S/O-ROT WT 235-130-187
	13:30 - 15:00	1.50	DRLPRO	02	D	P		SLIDE DRILL 8795-8810 = 15', WOB 18-50, TORQUE 2, SPP ON/OFF 2180/2130, SPM 95, GPM 426, MM RPM 68, MW 10.6# VIS 43

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# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/8/2008

End Date: 2/8/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
2/4/2009	15:00 - 16:00	1.00	DRLPRO	02	D	P		DRILLING 8810-8889 = 79' = MW 10.6# VIS 44 , WOB 18-22, TORQUE ON/OFF 13/9, TD RPM 60, MM RPM 68, SPM 95, GPM 426, SPP OF/OFF 2500/2130, P/U-S/O-ROT WT 235-130-187
	16:00 - 16:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	16:30 - 18:00	1.50	DRLPRO	02	D	P		SLIDE DRILL 8889-8900 = 11' WOB 18-50, TORQUE 2, SPP ON/OFF 2180/2130, SPM 95, GPM 426, MM RPM 68, MW 10.6#, VIS 41
	18:00 - 20:00	2.00	DRLPRO	02	D	P		DRILL 8900-8985 = 85' = 42.5 FPH, WOB 18-22, MW 10.6# VIS 44 , TORQUE ON/OFF 13/9, TD RPM 60, MM RPM 68, SPM 95, GPM 426, SPP OF/OFF 2500/2130, P/U-S/O-ROT WT 235-130-187
	20:00 - 21:30	1.50	DRLPRO	05	C	P		CCH FOR BIT TRIP, PUMP LCM SWEEP, BUILD SLUG
	21:30 - 0:00	2.50	DRLPRO	06	A	P		TRIP OUT FOR BIT & MOTOR CHANGE, DRAG ON BOTTOM +100K, BLOW DOWN KELLY, POOH
	0:00 - 3:00	3.00	DRLPRO	06	A	P		TRIP OUT BIT #2, L/D MUD MOTOR
	3:00 - 7:00	4.00	DRLPRO	06	A	P		M/U BIT#3, MUD MOTOR, TEST MUD MOTOR, TRIP IN, FILL @ SHOE, CIH TO 6930'
	7:00 - 7:30	0.50	DRLPRO	06	K	P		INSTALL ROTATING HEAD ,FILL PIPE
	7:30 - 8:30	1.00	DRLPRO	06	A	P		TRIP IN HOLE TO 8930'
	8:30 - 9:00	0.50	DRLPRO	03	D	P		W & R 54' TO BTM
	9:00 - 10:00	1.00	DRLPRO	02	D	P		DRILLING 8985-9000=15' WOB,18 MW 10.8VIS 43,RPM 50 MM 68,TQ ON/OFF 13/9,SPP ON/OFF 2360/2160,SPM 95,GPM 426,PU/SO/ROT 240/130/194
	10:00 - 11:00	1.00	DRLPRO	02	D	P		SLIDE DRILL 9000-9015 WOB 18/55,MW 10.8 VIS 43,RPM MM 68,SPP ON/OFF2270/2167
	11:00 - 12:30	1.50	DRLPRO	02	D	P		DRILLING 9015-9079=64' WOB,18 MW 10.8,VIS 43,RPM 50 MM 68,TQ ON/OFF 13/9,SPP ON/OFF 2360/2160,SPM 95,GPM 426,PU/SO/ROT 240/130/194
	12:30 - 15:00	2.50	DRLPRO	02	D	P		SLIDE DRILL 9079-9099 WOB 18/55, PU/SO 240/140, MW 10.8 VIS 43,RPM MM 68,SPP ON/OFF2270/2167
	15:00 - 16:30	1.50	DRLPRO	02	D	P		DRILLING 9099-9173=74 WOB 18,MW 10.8,VIS 43 RPM 50 MM 68,TQ ON/OFF 14/6,SPP ON/OFF2450/2124,SPM 95,GPM 426,PU/SO/ROT 240/140/194
2/5/2009	16:30 - 17:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	17:00 - 0:00	7.00	DRLPRO	02	D	P		DRILLING 9173-9305 =132=18.8 FPH WOB 14-22,MW 10.9,VIS 46 RPM 40-60 MM 68,TQ ON/OFF 14/6,SPP ON/OFF2450/2200,SPM 95,GPM 426,PU/SO/ROT 235/1165/194
	0:00 - 4:30	4.50	DRLPRO	02	D	P		DRILLING 9305-9365=60=13.3FPH,WOB 22 MW 10.9VIS 44,RPM 50,MM 68,TQ ON/OFF15/12,SPP ON/OFF2450/2200,SPM 95,GPM 426,PU/SO/ROT 235/165/195
	4:30 - 6:00	1.50	DRLPRO	05	C	P		CBU,MIX & PUMP SLUG,CHECK FLOW
	6:00 - 7:00	1.00	DRLPRO	06	A	P		TOH TO 8065',LOST POWER TO DWKS
	7:00 - 7:30	0.50	DRLPRO	08	B	P		TROUBLE SHOOT PLC,RE BOOT COMPUTER,& CALIBRATE
	7:30 - 13:00	5.50	DRLPRO	06	A	P		TOH,X/O BIT & M MTR
	13:00 - 15:00	2.00	DRLPRO	06	A	P		TIH TO 2750' ,BREAK CIRC,BLOW DOWN KELLY
	15:00 - 16:30	1.50	DRLPRO	09	A	P		SLIP & CUT DRILL LINE
	16:30 - 19:30	3.00	DRLPRO	06	A	P		TIH TO 6000',BREAK CIRC,CIH TO 9275
	19:30 - 20:00	0.50	DRLPRO	03	D	P		W & R 90' TO BTM

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# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/8/2008

End Date: 2/8/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
2/6/2009	20:00 - 20:30	0.50	DRLPRO	02	D	P		DRILLING 9365-9385,WOB 8-15 MW111.0.VIS 48,RPM 45,MM 68,TQ ON/OFF 15/12,SPP ON/OFF 2450/2200,SPM 95,GPM 426,PU/SO/ROT 235/165/204
	20:30 - 22:30	2.00	DRLPRO	02	D	P		SLIDE DRILL 9385-9404 WOB 20-30 MW 11.0 VIS 46,RPM M MTR 68,SPP ON OFF 2475/2250,GPM 426
	22:30 - 0:00	1.50	DRLPRO	02	D	P		DRILLING 9404-9457,WOB 18 MW11.1.VIS 45,RPM 45,MM 68,TQ ON/OFF 15/12,SPP ON/OFF 2450/2200,SPM 95,GPM 426,PU/SO/ROT 235/170/204
	0:00 - 3:00	3.00	DRLPRO	02	D	P		SLIDE DRILL 9457-9480=23=7.6 FPH WOB 35-45 RPM MM 68,SPM 95,GPM 426,SPP ON/OFF 2550/2400 MW 11.1 VIS 43,LOSING MUD 50 BBLs PUMP LCM SWEEPS,BYPASS SHAKERS @9475'
	3:00 - 15:30	12.50	DRLPRO	02	D	P		DRILLING 9480-9880= 400=32 FPH WOB 18,MW 11.6 VIS 43,LCM 5% RPM 45 MM 65, SPM 90,GPM 405,PU/SO/RT 250/165/204TOTAL MUD LOSS 120 BBLs TD 9880'@ 1530 HRS 02/06/2009
2/7/2009	15:30 - 17:00	1.50	DRLPRO	05	C	P		CCH, F/ WIPER TRIP
	17:00 - 19:30	2.50	DRLPRO	06	E	P		WIPER TRIP TO 8000'
	19:30 - 21:00	1.50	DRLPRO	05	C	P		CCH RU TO LDDS
	21:00 - 0:00	3.00	DRLPRO	06	B	P		SM W/ WEATHERFORD & RIG CREWS LDDS
	0:00 - 5:30	5.50	DRLPRO	06	B	P		LDDS,PULL WEAR BUSHING
	5:30 - 11:30	6.00	DRLPRO	11	G	P		SM RU HALLIBURTON RUN TRIPLE COMBO,LOGGERS TD 9883',RD SAME
	11:30 - 20:00	8.50	DRLPRO	12	A	P		SM RU WEATHERFORD TRS RUN 236 JTS OF 41/2,11.6# I-80 LTC CSG
	20:00 - 21:30	1.50	DRLPRO	05	A	P		LAND CSG W/60K,RU BJ CIRC CSG
2/8/2009	21:30 - 0:00	2.50	DRLPRO	12	E	P		SM W/ BJ,TEST PUMP & LINES,TO 4500#PUMP 20 BBLs MUD CLEAN,442 SKS(255.8 BBLs) LEAD @ 11.1#,1290 SKS (301BBLs) TAIL@ 14.3# SHUT DOWN WASH PUMP& LINES,DROP TOP PLUG DISPLACE W/ 152.8 BBLs FW BUMP PLUG W/ 3450 PSI 500 OVER DIFF PRESS,FLOATS OK,LOST RETURNS START OF DISPLACEMENT,NO CMT TO SURFACE
	0:00 - 2:30	2.50	DRLPRO	12	A	P		LD LANDING JT & SETTING TOOL,SET PACKOFF & TEST TO 5000
	2:30 - 8:30	6.00	DRLPRO	14	A	P		NDBOPE,CLEAN MUD TANKS,RELEASE RIG TO NBU-922-18F4CS@0830 HRS 02/08/2009

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# **US ROCKIES REGION** **Operation Summary Report**

Well: NBU 922-18K1BS (RED WELL)				Spud Date: 12/30/2008				
Project: UTAH-UINTAH			Site: NBU 922-18L PAD				Rig Name No: MILES 2/2	
Event: COMPLETION			Start Date: 10/20/2009				End Date: 10/31/2009	
Active Datum: RKB @4,925.00ft (above Mean Sea Level)				UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0				
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
10/21/2009	7:00 - 7:30	0.50	COMP	48		P		JSA- RUSU ON NEW BASE BEAM.
	7:30 - 18:00	10.50	COMP	31	I	P		ROADED TO LOC 10/20/09. SPOT NEW BASE BEAM. RUSU. ND WH. NU BOP. SPOT EQUIP. RU FLOOR AND TBG EQUIP. MU 3-7/8 BIT, BIT SUB. RIH AS MEAS AND PU JTS 2-3/8" L-80 TBG. TAG AT 9806' W/ 309-JTS IN.
10/22/2009	7:00 - 7:30	0.50	COMP	48		P		JSA- D/O FC. LD TBG.
	7:30 - 15:30	8.00	COMP	44	A	P		RU PRW SWIVEL W/ #309 AND EST REV CIRC. C/O CMT FRO 9806' TO FC AT 9832'. D/O FC AND 10' HARD CMT TO 9842' W/ 310-JTS 2-3/8" L-80 TBG IN. CIRC CLEAN. RD PWR SWIVEL. POOH AS LD 5-JTS. P-TEST TO 3000#. GOOD. CONT POOH AS LD TBG. LD BIT AND BIT SUB. RD FLOOR. ND BOP. NU FRAC VALVES. RDSU.
10/24/2009	7:00 - 10:00	3.00	COMP	47	C	P		X-OUT FMC TBG HEAD DUE T/ TBG HEAD IS THE SAME BATCH AS ON THE 18K2 WELL. (( THE ONE THAT PARTED. ))
10/26/2009	7:00 - 7:30	0.50	COMP	48		P		HSM. SIM OPS.
	7:30 - 17:00	9.50	COMP	37	B	P		MIRU B&C QUICK TEST. PSI TEST CSG & BOTH FRAC VALVES T/ 7000#. GOOD TEST. BLEED OFF PSI. RU ON NEXT WELL. MIRU CUTTER'S WL. STG 1)PU 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH PERF F/ 9810'-14', 4 SPF, 16 HOLES. 9792'-94', 3 SPF, 6 HOLES. 9728'-30', 3 SPF, 6 HOLES. 9649'-54', 3 SPF, 15 HOLES. POOH. SWI. WINTERIZE WELL HEAD.

**RECEIVED** November 03, 2009



**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: MILES 2/2

Event: COMPLETION

Start Date: 10/20/2009

End Date: 10/31/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
10/27/2009	7:00 - 23:59	16.98	COMP	36	B	P		<p>STG 1) OPEN WELL 1109# BEG PUMPING, BRK @ 3930# @ 6.4 BPM. SD ISIP 3103#, FG .75. BEG FRAC. EST INJT RT @ 51.4 BPM @ 5453# = 100% PERF'S OPEN. PUMP 44,977# 30/50 WHITE &amp; TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2981# FG .74. SWI. X-OVER T/ GREEN.</p> <p>STG 2)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 &amp; 120 DEG PHASING. RIH SET CBP @ 9628' P/U PERF F/ 9596'-98', 4 SPF, 8 HOLES. 9575'-78', 4 SPF, 12 HOLES. 9494'-96', 4 SPF, 8 HOLES. 9450'-52', 3 SPF, 6 HOLES. 9366'-68', 3 SPF, 6 HOLES. POOH. OPEN WELL 2680#. BEG PUMPING, BRK @ 3080# @ 6.4 BPM. SD ISIP 2680# FG .71. BEG FRAC, EST INJT RT @ 51.4 BPM @ 5700# =81% PERFS OPEN. PUMP 40,969# 30/50 WHITE &amp; TAIL IN W/ 5,000# TLC. SD ISIP 2970# FG .74. SWI. X-OVER T/ GREEN WELL.</p> <p>STG 3)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90,120 &amp; 180 DEG PHASING. RIH SET CBP @ 9,354' P/U PERF F/ 9320'-24', 4 SPF, 16 HOLES. 9268'-72', 3 SPF, 12 HOLES. 9086'-92', 2 SPF, 12 HOLES. POOH. WHP 2,356 PSI, BRK 3,556 PSI @ 6.4 BPM. ISIP 2,767 PSI, FG .74. PUMP 100 BBLS @ 51.5 BPM @ 5,460 PSI = 100% HOLES OPEN. MP 5,844 PSI, MR 51.7 BPM, AP 5,060 PSI, AR 47.5 BPM, ISIP 2,706 PSI, FG .72, NPI -61 PSI. PMP 836 BBLS SW &amp; 25,905 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 30,905 LBS,</p> <p>STG 4 ) PU 4 1/2" HAL CBP &amp; 3 3/8" EXP GNS, 23 GRM, .36 HOLES, 90 &amp; 120 DEG PHASING. RIH SET CBP @ 9,060' &amp; PERF 9,026' - 30' 4SPF, 8,964' - 70' 3SPF, 8,902' - 04' 3SPF, 40 HOLES WHP 2,218 PSI, BRK 2,841 PSI @ 6.3 BPM. ISIP 2,557 PSI, FG .72. PUMP 100 BBLS @ 51.5 BPM @ 4,950 PSI = 100% HOLES OPEN. MP 5,567 PSI, MR 51.7 BPM, AP 4,614 PSI, AR 47.9 BPM, ISIP 2,882 PSI, FG .75, NPI 325 PSI. PMP 879 BBLS SW &amp; 27,239 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 32,239 LBS,</p> <p>STG 5 ) PU 4 1/2" HAL CBP &amp; 3 3/8" EXP GNS, 23 GRM, .36 HOLES, 90 &amp; 120 DEG PHASING. RIH SET CBP @ 8,862' &amp; PERF 8,828' - 32' 3SPF, 8,790' - 92' 4SPF, 8,726' - 28' 4SPF, 8,654' - 56' 3SPF, 8,618' - 20' 3SPF, 40 HOLES. WHP 875 PSI, BRK 3,554 PSI @ 6.5 BPM. ISIP 2,246 PSI, FG .69.</p>

**RECEIVED** November 03, 2009



# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18K1BS (RED WELL)					Spud Date: 12/30/2008				
Project: UTAH-UINTAH			Site: NBU 922-18L PAD				Rig Name No: MILES 2/2		
Event: COMPLETION			Start Date: 10/20/2009				End Date: 10/31/2009		
Active Datum: RKB @4,925.00ft (above Mean Sea Level)				UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0					
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation	
								PUMP 100 BBLS @ 56.3 BPM @ 5,450 PSI = 76% HOLES OPEN. MP 5,509 PSI, MR 56.6 BPM, AP 4,666 PSI, AR 54 BPM, ISIP 2,662 PSI, FG .74, NPI 416 PSI. PMP 3,306 BBLS SW & 133,872 LBS OF 30/50 SND & 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 138,872 LBS,  STG 6 ) PU 4 1/2" HAL CBP & 3 3/8" EXP GNS, 23 GRM, .36 HOLES, 120 DEG PHASING. RIH SET CBP @ 8,512' & PERF 8,478' - 82' 3SPF, 8,424' - 30' 3SPF, 8,356' - 60' 3SPF, 42 HOLES.  SWI SDFN. HSM. FRACING & PERFORATING	
10/28/2009	6:30 - 7:00	0.50	COMP	48		P			

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# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: MILES 2/2

Event: COMPLETION

Start Date: 10/20/2009

End Date: 10/31/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:00 - 15:00	8.00	COMP	36	B	P		<p>STG 6 ) WHP 1577 PSI, BRK 3775 PSI @ 6.4 BPM. ISIP 1705 PSI, FG .63. PUMP 100 BBLS @ 51.4 BPM @ 4800 PSI = 62% HOLES OPEN. MP 5368 PSI, MR 51.8 BPM, AP 4417 PSI, AR 47.5 BPM, ISIP 2693 PSI, FG .75, NPI 988 PSI. PMP 1461 BBLS SW &amp; 54,684 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 59,684 LBS,</p> <p>STG 7)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 &amp; 120 DEG PHASING. RIH SET CBP @ 8180' P/U PERF F/ 8146'-50', 4 SPF, 16 HOLES. 8104'-06', 4 SPF, 8 HOLES. 8064'-68', 3 SPF, 12 HOLES. 7956'-58', 3 SPF, 6 HOLES. POOH. WHP 900 PSI, BRK 2643 PSI @ 6.4 BPM. ISIP 1634 PSI, FG .63. PUMP 100 BBLS @ 51.4 BPM @ 4300 PSI = 79% HOLES OPEN. MP 4969 PSI, MR 51.7 BPM, AP 3891 PSI, AR 43.1 BPM, ISIP 2383 PSI, FG .73, NPI 749 PSI. PMP 1461 BBLS SW &amp; 17,965 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 22,965 LBS, SWI. X-OVER T/ GREEN WELL.</p> <p>STG 8)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7888' P/U PERF F/ 7852'-58', 4 SPF, 24 HOLES. 7820'-24', 4 SPF, 16 HOLES. POOH. WHP 610 PSI, BRK 3229 PSI @ 6.4 BPM. ISIP 2221 PSI, FG .71. PUMP 100 BBLS @ 51.4 BPM @ 4900 PSI = 81% HOLES OPEN. MP 5219 PSI, MR 51.8 BPM, AP 4293 PSI, AR 45.1 BPM, ISIP 2750 PSI, FG .78, NPI 529 PSI. PMP 774 BBLS SW &amp; 25,345 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 30,345 LBS, SWI. PU 4 1/2 8K HAL CBP. RIH SET KILL PLUG @ 7770'. POOH, SWI. FINISH PAD. RDMO CUTTER'S WL &amp; SCHLUMBERGER FRAC SERV. GREAT JOB BY BOTH. DRILLING PLUGS MIRU, ND FRAC VALVE, NU BOP'S, NU MILL, POBS, XN SN, PU TBG, RIH WITH TBG, TAG 1ST PLUG @ 7770'. 1ST PLUG 7770'      0' SAND      8 MIN      200# KICK 2ND PLUG 7888'      10' SAND      20 MIN      400# KICK 3RD PLUG 8180'      30' SAND      10 MIN      600# KICK TURN WELL TO FBC FOR NIGHT.</p>
10/30/2009	7:00 - 7:30	0.50	COMP	48		P		
	7:30 - 7:30	0.00	COMP	44		P		

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**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: MILES 2/2

Event: COMPLETION

Start Date: 10/20/2009

End Date: 10/31/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
10/31/2009	7:00 - 7:30	0.50	COMP	48		P		DRILL PLUGS
	7:30 - 7:30	0.00	COMP	44		P		DRILL PLUGS PLUG #4 8512' 30' SAND 10 MIN 700# KICK PLUG #5 8862' 20' SAND 10 MIN 200# KICK PLUG #6 9060' 20' SAND 8 MI9N 300# KICK PLUG #7 9366' 15' SAND 10 MIN 200# KICK PLUG #8 9628' 20' SAND 15 MIN 200# KICK RIH TO 9831' TAG, 310 JTS, LD 17 JTS TO 9321' LAND TBG. ND BOP'S, NU WH, PUMP OFF BIT SUB.1500# TURN TO FBC 1:00 PM. RDMO TO BLUE WELL
11/1/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2825#, TP 1725#, 20/64" CK, 45 BWPH, TRACE SAND, LIGHT GAS TTL BBLS RECOVERED: 3080 BBLS LEFT TO RECOVER: 7702
	10:30 -		PROD	50				WELL TURNED TO SALES @ 1030 HR ON 11/01/2009 - 1300 MCFD, 1080 BWPD, FTP 1850#, CP 3200#, CK 20/64"
11/2/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 3350#, TP 1975#, 20/64" CK, 32 BWPH, TRACE SAND, 1320 GAS TTL BBLS RECOVERED: 4013 BBLS LEFT TO RECOVER: 6769

**RECEIVED** November 03, 2009

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other			5. Lease Serial No. UTU0359		
b. Type of Completion <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resvr. Other _____			6. If Indian, Allottee or Tribe Name		
2. Name of Operator KERR-MCGEE OIL&GAS ONSHORE			7. Unit or CA Agreement Name and No. 891008900A		
3. Address P.O. BOX 173779 DENVER, CO 80217			8. Lease Name and Well No. NBU 922-18K1BS		
3a. Phone No. (include area code) Ph: 720-929-6100			9. API Well No. 43-047-39824		
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface NESW 2551FSL 1214FWL 40.03578 N Lat, 109.48571 W Lon At top prod interval reported below NESW 2604FSL 1819FWL At total depth NESW 2595FSL 1818FWL			10. Field and Pool, or Exploratory NATURAL BUTTES		
14. Date Spudded 10/31/2008			11. Sec., T., R., M., or Block and Survey or Area Sec 18 T9S R22E Mer		
15. Date T.D. Reached 02/06/2009			12. County or Parish UINTAH		
16. Date Completed <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod. 11/01/2009			13. State UT		
17. Elevations (DF, KB, RT, GL)* 4899 GL					
18. Total Depth: MD 9880 TVD 9826			19. Plug Back T.D.: MD 9831 TVD 9723		
20. Depth Bridge Plug Set: MD TVD					
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) BHV-CLB-ACRT-SDL-DSN			22. Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Directional Survey? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (Submit analysis)		

## 23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STEEL	36.7		40		28			
12.250	9.625 J-55	40.0		2820		700			
7.875	4.500 I-80	11.6		9857		1732			

## 24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	9321							

## 25. Producing Intervals W/S MUD

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) MESAVERDE	7820	9814	7820 TO 9814	0.360	327	OPEN
B)						
C)						
D)						

## 27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
7820 TO 9814	PMP 10,467 BBLs SLICK H2O & 410,956 LBS 30/50 SD.

## 28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
11/01/2009	11/06/2009	24	→		1963.0	480.0			FLows FROM WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
20/64	1409	2725.0	→		1963	480		PGW	

## 28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #78251 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

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## 28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

## 28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

29. Disposition of Gas(Sold, used for fuel, vented, etc.)  
SOLD

## 30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
GREEN RIVER MAHO GANY WASATCH MESAVERDE	1789 2553 5114 7947	7812 9823			

## 32. Additional remarks (include plugging procedure):

ATTACHED TO THIS COMPLETION REPORT IS THE CHRONOLOGICAL WELL HISTORY AND END OF WELL REPORT.

## 33. Circle enclosed attachments:

- |   |                    |               |                       |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.)     | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis   | 7 Other:      |                       |

## 34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #78251 Verified by the BLM Well Information System.  
For KERR-MCGEE OIL&GAS ONSHORE, LP, sent to the Vernal

Name (please print) ANDY LYTLETitle REGULATORY ANALYSTSignature (Electronic Submission)Date 12/01/2009

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**\*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\***

# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/8/2008

End Date: 2/8/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
12/8/2008	-							
12/29/2008	2:00 - 4:00	2.00	DRLSUR	01	C	S		Prep to skid rig, rig up 2" steam hoses.
	4:00 - 6:00	2.00	DRLSUR	01	C	P		Skid rig to NBU 922-18K1BS
	6:00 - 14:30	8.50	DRLSUR	01	C	P		Heat 16" conductor and 20" conductor, install new "O" ring seal. Rig up both sections of conductor. Rig up flow line to conductor and preacher stand manifold. Install blank flange to preacher stand manifold. Hook up mud line. Install turn buckles and center conductor. Install fill up line and flow line manifold. Install 2" jet line on low line manifold. Transferred mud to pit and circulate over shakers to clean out shale and LCM. Install pipe racks and unload casing.
	14:30 - 21:30	7.00	DRLSUR	01	C	S		It was noticed that the landing sleeve for the DTO well head was not installed. Pickup conductor, install landing sleeve and tack with welder. In the process of doing this the new "O" ring seal was broken, had to wait on new seal. Install conductor, flow line, turn buckles and fill up line. It took 3 hours after "O" ring showed up to get conductor nipped up
	21:30 - 23:00	1.50	DRLSUR	12	A	P		Chage out casing bails for drilling bails
	23:00 - 0:00	1.00	DRLSUR	08	A	S		Inspect saver sub, change out dies and bolts in grabber. Not showed as rig repair on IADC
12/30/2008	0:00 - 0:30	0.50	DRLSUR	08	A	S		Inspect savor sub, change dies and bolts in grabber
	0:30 - 3:30	3.00	DRLSUR	06	A	P		Pickup stand with mud motor, break and change out mud motors
	3:30 - 4:00	0.50	DRLSUR	01	B	P		Pressure test mud line and pump#2 to 3500 psi, pop-off leaking on pump #1
	4:00 - 4:30	0.50	DRLSUR	08	B	S		Change out pop-off on #1 pump
	4:30 - 5:00	0.50	DRLSUR	01	B	P		Pressure test both pumps to 3500 psi for 10 minutes. Blow down mud line
	5:00 - 6:00	1.00	DRLSUR	08	A	S		Change out winch line on driller side
	6:00 - 7:00	1.00	DRLSUR	01	B	S		Prepare to spud. Organized rig floor. Gather slips, collar clamp, thaw and clean tool joint threads. Finish changing out winch line on driller side. Pickup new bit. NOTE THIS SHOULD BE DOWN TIME. IF THEY HAD THERE HEATERS RUNNING AND SUB TARPED IN THIS WOULD NOT HAVE BEEN A PROBLEM
	7:00 - 8:30	1.50	DRLSUR	06	A	P		Make up bit, scribe high side of motor and pickup MWD tools
	8:30 - 9:00	0.50	DRLSUR	08	A	S		Tagged bottom at 111'. break circulation, no returns, flow line frozen
	9:00 - 10:30	1.50	DRLSUR	08	B	S		Thaw out flow line
	10:30 - 14:30	4.00	DRLSUR	02	D	P		Drill 111' - 284', WOB 2 - 10k, GPM 736, Pump #1 SPM 82, Pump #2 SPM 82, RPM 55, Motor RPM 117, SPP On/Off Bottom 1075/875, Torque On/Off Bottom 3/0, Mud Wt 9.9, Visc 37, Footage 173', FPH 43.25
	14:30 - 15:00	0.50	DRLSUR	07	A	P		Rig service
	15:00 - 15:30	0.50	DRLSUR	08	A	S		Repair ST-80 change out clamp/unclamp cable



**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/8/2008

End Date: 2/8/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	15:30 - 17:00	1.50	DRLSUR	02	D	P		Drill 284' - 374', WOB 2 - 10k, GPM 736, Pump #1 SPM 82, Pump #2 SPM 82, RPM 55, Motor RPM 117, SPP On/Off Bottom 1160/1075, Torque On/Off Bottom 3/0, Mud Wt 9.9, Visc 37, Footage 90', FPH 60
	17:00 - 17:30	0.50	DRLSUR	23		S		Safety shut down, inspect top drive for missing bolts, found 2 bolts with out keeper pins on bail ears
	17:30 - 18:00	0.50	DRLSUR	08	A	S		Repair ST-80 adjusted cables for forward backward controls
	18:00 - 0:00	6.00	DRLSUR	02	D	P		Drill 284' - 1000', WOB 10-25k, GPM 736, Pump #1 SPM 82, Pump #2 SPM 82, RPM 55, Motor RPM 117, SPP On/Off Bottom 2350/2120, Torque On/Off Bottom 9/3, Mud Wt 9.8, Visc 35, Footage 716', FPH 119.3
								Slide Parameters (111'-131') (286'-311') (374'-398') (567'-582') (747'-760') (834'-859') (1023'-1040') WOB 18k, GPM 736, Pump #1 SPM 82, Pump #2 SPM 82, RPM 0, Motor RPM 117, SPP On/Off Bottom 2350/2120, Torque On/Off Bottom 0/0, Mud Wt 9.8, Visc 35,
12/31/2008	0:00 - 9:30	9.50	DRLSUR	02	D	P		DRILL F/1000'-1871, WOB 10-25k, GPM 736, Pump #1 SPM 82, Pump #2 SPM 82, RPM 55, Motor RPM 117, SPP On/Off Bottom 2350/2120, Torque On/Off Bottom 9/3, Mud Wt 9.8, Visc 35, Footage 871', FPH 91.68
	9:30 - 12:00	2.50	DRLSUR	22	G	X		LOST RETURNS @ 1869' BUILD VOL. PUMP 3 50 BBLS HIGH VIS AND 10% LCM SWEEPS. LOST OVER 300 BBLS.
	12:00 - 0:00	12.00	DRLSUR	02	D	P		WENT BACK TO DRILLING WITH LOWER SPM 72/72 FOR 1 HR. AND REGAINED FULL RETURNS. DRILL F/1871-2790, WOB 10-25k, GPM 738, PUMP #1 SPM 82, PUMP #2 SPM 82, RPM 50-55, MOTOR RPM 112, SPP ON/OFF BOTTOM 2200/1790, TORQUE ON/OFF BTM 9/3, MUD WT 9.1, VIS 34, FTG 919', FPH 76.5 BYPASS SHAKERS FOR LCM, DUMP SANDTRAP EVERY HR.
1/1/2009	0:00 - 1:00	1.00	DRLSUR	02	D	P		DRILL F/2790-2840, WOB 10-25k, GPM 738, PUMP #1 SPM 82, PUMP #2 SPM 82, RPM 50-55, MOTOR RPM 112, SPP ON/OFF BOTTOM 2200/1790, TORQUE ON/OFF BTM 9/3, MUD WT 9.1, VIS 34, FTG 50', FPH 50.0 BYPASS SHAKERS FOR LCM, DUMP SANDTRAP EVERY HR.
	1:00 - 2:00	1.00	DRLSUR	05	C	P		CIRC AND PUMP HIGH VIS AND LCM SWEEP, BUILD AND PUMP SLUG.
	2:00 - 9:00	7.00	DRLSUR	06	A	P		TRIP OUT, L/D DIRECTIONAL TOOLS. THAW OUT RIG FLOOR WHILE TRIPPING TO USE EQUIPMENT TO TRIP. STEAM LINES, MUD LINE AND LINES FREEZING WHILE FILLING HOLE.
	9:00 - 10:30	1.50	DRLSUR	06	A	P		PICK UP BIT, BIT SUB AND TRIP IN WITH 2-8" DC's NO TIGHT SPOTS. 14' OF FILL ON BTM.
	10:30 - 13:30	3.00	DRLSUR	22	G	P		LOST CIRC 15 MINS AFTER PUMPING, BUILD MUD AND PUMP LCM SWEEPS. LOST 300 BBLS OF MUD TO WELL.
	13:30 - 17:00	3.50	DRLSUR	06	D	P		TRIP OUT L/D 2-8" DC'S HELD SAFETY WITH L/D TRUCK TO L/D DC'S.
	17:00 - 19:30	2.50	DRLSUR	12	A	P		CHANGE OUT BAILS AND ELEVATORS AND RIG UP CASING EQUIPMENT.
	19:30 - 20:00	0.50	DRLSUR	07	A	P		CLEAN RIG FLOOR OF ICE.
	20:00 - 0:00	4.00	DRLSUR	12	C	P		RUN 64 JTS. OF 9 5/8, 40#, J-55 LTC
1/2/2009	0:00 - 2:00	2.00	CSG	12	C	P		RUN 64 JTS. OF 9 5/8, 40#, J-55 LTC LAND AND SET CASING AT 2820'

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/8/2008

End Date: 2/8/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
1/24/2009	2:00 - 6:30	4.50	CSG	05	D	X		CIRC CASING DRILLING NIPPLE LEAKING FROM ORING SEAL. WORK ON CELLAR PUMPS TO SUCK OUT CELLAR PREPARE TO CMT. CASING HELD SAFETY MTG WITH BJ CEMENT AND PUMPED LEAD 180 BBLs, 300 SKS OF PREMIUM LITE 11.0#, 3.38 YIELD..TAIL 42 BBLs 200 SX, GLASS G, 15.8#, 1.15 YIELD..PUMPED 211 BBL DISPLACEMENT, BUMPED PLUG WITH 600 PSI FLOAT EQUIPMENT HELD. GOT 8 BBLs OF CMT TO SURFACE.. CMT DROPPED OUT OF SIGHT. RAN 260' OF 3/4" PIPE FOR TOP JOB. PUMPED 20.5 BBL, 100SKS CLASS G 15.8# AND GOT CMT BACK TO SURFACE.
	6:30 - 8:30	2.00	CSG	12	E	P		WAIT ON CMT FELL BACK OUT OF SIGHT.
	8:30 - 11:00	2.50	CSG	12	E	P		RAN 80' OF 3/4" PIPE AND PUMPED 20.5 BBL, 100SKS CLASS G 15.8# AND GOT CMT BACK TO SURFACE. FELL 2' AND STAYED THERE.
	11:00 - 13:00	2.00	CSG	13	A	P		WAIT ON CMT FELL BACK 2' BELOW FLOWLINE AND STAYED THERE.
	13:00 - 14:30	1.50	CSG	12	E	P		FLUSH FLOWLINE, BLOW DOWN ALL MUD LINES. RIG DOWN CMT EQUIPMENT.
	14:30 - 15:00	0.50	CSG	13	A	P		L/D LANDING JT. AND BAILS AND ELEVATORS, L/D MOUSE HOLE. UNBOLT AND NIPPLE DOWN DRILLING NIPPLE.
	15:00 - 16:00	1.00	CSG	12	E	P		DUMP AND CLEAN MUD PITS, PUMPS AND ALL MUD LINES. RELEASED RIG AT 23:59 ON 1/2/09
	16:00 - 20:00	4.00	CSG	14	A	P		PREPARE RIG FOR SKIDDING, SKID RIG TO 18K1BS & CENTER UP, RIG UP EQUIPMENT AFTER SKID-STAIRS, CATWALK, V-DOOR
	20:00 - 0:00	4.00	CSG	01	A	P		6 MONTH MAINTENANCE ON RAMS, MP MOTORS, TOP DRIVE, ELECTRICAL SYSTEM, QTRLY INSP ON DRAWWORKS, MONTHLY INSPECTION ON MOTORS
	18:00 - 21:00	3.00	DRLPRO	01	C	P		NIPPLE UP BOPE, INSTALL NEW CHOKE LINE EXTENSION FROM CHOKE HOUSE, INSTALL DRIP PANS, TURNBUCKLES, FUNCTION TEST BOPS
1/25/2009	21:00 - 0:00	3.00	DRLPRO	08	B	P		TEST BOP'S=ANN 250-5 MIN, 2500-10, TEST RAMS, CHOKE LINE, CHOKE MANIFOLD, IBOP, FLOOR VALVE, TOP DRIVE 250/5, 5000/10 MIN
	0:00 - 7:30	7.50	DRLPRO	14	A	P		CHANGE OUT RAISING CYLINDER ON GRABBER OF TOP DRIVE.
	7:30 - 12:00	4.50	DRLPRO	15	A	P		DAILY RIG SERVICE
	12:00 - 15:30	3.50	DRLPRO	08	B	Z		CHANGE OUT DRILLING LINE (COMPLETE) WITH NEW SPOOL OF LINE, SET TWIN STOPS
	15:30 - 16:00	0.50	DRLPRO	07	A	P		M/U BIT #-QD506 W/ 6-12, P/U NEW BENT MUD MOTOR 1.11DEG, ORIENT TOOLS, P/U 1-HWDP
1/26/2009	16:00 - 21:00	5.00	DRLPRO	09	A	P		TO TEST MUD MOTOR-TD FAILED
	21:00 - 23:00	2.00	DRLPRO	06	A	P		TD FAILURE IN CONTROL SYSTEMS, UNABLE TO MAKEUP, TROUBLESHOOT FAILURE
	23:00 - 0:00	1.00	DRLPRO	08	B	Z		TROUBLE SHOOT TOP DRIVE PROBLEM, CHANGE CABLES, ENCODER CARD, FOUND LOOSE PINS IN ENCODER PIGTAIL
	0:00 - 15:00	15.00	DRLPRO	08	B	Z		SERVICE RIG, CHANGE OIL IN TOP DRIVE
	15:00 - 15:30	0.50	DRLPRO	07	A	P		FUNCTION TEST MUD MOTOR-OK, TRIP IN HOLE TO 1800', INSTALL ROTATING HEAD RUBBER, TRIP IN TO 2769, TAG CEMENT,
	15:30 - 18:00	2.50	DRLPRO	06	A	P		DRILL CEMENT, PLUG, FLOAT COLLAR, SHOE, CEMENT TO 2840
	18:00 - 20:00	2.00	DRLPRO	02	F	P		

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/8/2008

End Date: 2/8/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
1/27/2009	20:00 - 21:30	1.50	DRLPRO	02	D	P		SPUD ACTUAL, DRILL 2840-2881 = 41' = 27.3 FPH TORQUE ON/OFF 4/1.5K, SPP ON/OFF 1250/1175, STRING WT UP/DOWN/ROT , WOB 10, SPM 70,GPM 315, RPM 45, MW 9.6, VIS 30, LCM 0, SLIDE DRILL 2881-2889 = 8' = 4 FPH, SPP 1100, WOB 18-24, SPM 90,GPM 405, RPM 0, MW 9.4, VIS 33, LCM 0,
	21:30 - 23:30	2.00	DRLPRO	02	D	P		ROTARY DRILL 2889-2929 = 40' = 80 FPH, TORQUE ON/OFF 4/1.5K, SPP ON/OFF 1250/1175, STRING WT UP/DOWN/ROT 107/97/105, WOB 10, SPM 70,GPM 315, RPM 45, MW 9.4, VIS 30, LCM 0,
	23:30 - 0:00	0.50	DRLPRO	02	D	P		DRILL 2889-2945 = 56' = 112 FPH, MW 9.5# 34 VIS, SPM 90, GPM 404, SPP ON/OFF 1250/950, DIFF 200, RPM 45, TORQUE ON/OFF 4/2K,
	0:00 - 0:30	0.50	DRLPRO	02	D	P		SLIDE DRILL 2945-2951, MW 9.5# 34 VIS, SPM 90, GPM 404, SPP ON/OFF 1250/95
	0:30 - 2:00	1.50	DRLPRO	02	D	P		ROT DRILL 2951-2951 TO WIPE FORMATION, SLIDE 2954-2959 = 5', MW 9.5# VIS 35, SPM 90, GPM 404, SPP 950-1050, WOB 5-??, UNABLE TO SLIDE WITH NORMAL WOB, STRING SLIPS DOWN PUTTING HIGH WOB AND STALLING MOTOR
	2:00 - 3:30	1.50	DRLPRO	02	D	P		ROT DRILL 2959-3039 = 80' = 80 FPH, MW 9.5# VIS 34, WOB 18-22, SPP ON/OFF 1250/975, DIFF 250, GPM 404, SPM 90, RPM 45, TORQUE ON/OFF 4.2/2.5K,
	3:30 - 4:30	1.00	DRLPRO	02	D	P		SLIDE DRILL 3039-3052, 13', WOB 20, DIFF PRESS 175, SPP ON/OFF 1050/980, SPM 90, GPM 404
	4:30 - 6:00	1.50	DRLPRO	02	D	P		DRILL 3052-3071 = 19' MW 9.5#, VIS 35, SPM 90, GPM 404, SPP ON/OFF 1250/950, DIFF 200, RPM 55, TORQUE ON/OFF 6/2K, WOB 18
	6:00 - 6:30	0.50	DRLPRO	02	D	P		SLIDE DRILL 3071-3081, MW 9.5#, VIS 35, SPM 90, GPM 404, DIFF 120, SPP ON/OFF 1180/1060
	6:30 - 7:30	1.00	DRLPRO	02	D	P		ROT DRILL 3081-3134 = 53' = 106 FPH, MW 9.5# VIS 35, SPM 90, GPM 404, SPP ON/OFF 1240/1080, DIFF 250, RPM 55, TORQUE ON/OFF 6/2K, WOB 18
	7:30 - 8:00	0.50	DRLPRO	02	D	P		SLIDE DRILL 3134-3139, MW 9.5#, VIS 35, SPP ON/OFF 1150/1030,
	8:00 - 9:30	1.50	DRLPRO	02	D	P		CIRCULATE HOLE, BUILD SLUG FOR TRIP
	9:30 - 10:00	0.50	DRLPRO	05	C	P		TRIP OUT WITH BIT #1, HOLE GOOD, PULL ROTATING HEAD RUBBER
	10:00 - 12:00	2.00	DRLPRO	06	A	P		L/D MUD MOTOR WITH STABILIZER, L/D IBS, SERVICE RIG
	12:00 - 13:30	1.50	DRLPRO	06	J	P		P/U DIRECTIONAL MOTOR, M/U DIRECTIONAL TOOLS, ORIENT SAME, M/U BIT #1RR,
	13:30 - 14:00	0.50	DRLPRO	07	A	P		TRIP IN HOLE, HOLE GOOD,
	14:00 - 14:30	0.50	DRLPRO	06	J	P		DRILL 3139-3599 = 460' = 61.3 FPH AVG, MW 9.5#, 36 VIS, SPM 90, GPM 404, SLIDE DRILL 3253-3265, 3316-3331, 3347-3355, 3410-3420, 3442-3450, 3502-3512, 3537-3545, TORQUE ON/OFF 3/1K, SPP ON/OFF 1480/1180, WOB 14-16, SPM 90, GPM 404, ROP 25-50,==ROTARY DRILL TORQUE ON/OFF 7.2/2.5K, SPP ON/OFF 1260-1500/1150-1225, ST WT UP/DOWN/ROT 118/105/108

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/8/2008

End Date: 2/8/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
1/28/2009	0:00 - 16:30	16.50	DRLPRO	02	D	P		DRILL 3599-4449= 850' = 51.5 AVG ROP, MW 9.5#, VIS 36, WOB 18-20, SPM 90, SPP ON/OFF 11780/1560, DIFF 280, RPM 45, GPM 404, TORQUE ON/OFF 8/4K, SLIDE 3599-3511, 3631-3639, 3693-3703, 3725-3733, 3788-3802, 3818-3830, 3881-3894, 3913-3928, 3976-3988, 4007-4019, 4071-4081, 4165-4177, 4197-4205, 4260-4275, 4291-4306, 4354-4369==LOST 80 BBL MUD @ 4185, PUMPED LCM PILLS AND STOPPED LOSSES RIG SERVICE
	16:30 - 17:00	0.50	DRLPRO	02	D	P		
	17:00 - 0:00	7.00	DRLPRO	02	D	P		DRILL 4449-4772 = 323' = 46.1 FPH, MW 9.6#, VIS 38, ROT DRILL WOB 22, RPM 45, SPP ON/OFF 1850/1550, DIFF 250-300, SLIDE 4449-4464, 4607-4627, 4734-4747, WOB 15-25, SPP ON/OFF 1675/1550, DIFF 125, SPM 90, GPM 404, P/U-SO-ROT WT 145-112-131,
1/29/2009	0:00 - 13:30	13.50	DRLPRO	02	D	P		DRILL 4772-5395 = 623' = 46.1 FPH, MW 9.8#, VIS 38, SPM 90, SPP 1550-1800, GPM 404, RPM 55, MOTOR RPM 64, TORQUE ON/OFF 6-8/3-4K, ST WT UP/DN/ROT 153-118-129, WOB 18, SLIDE 4828-4845, 4955-4967, TORQUE ON/OFF 8.5/4K, DIFF 250, WOB 22 RIG SERVICE
	13:30 - 14:00	0.50	DRLPRO	07	A	P		
	14:00 - 0:00	10.00	DRLPRO	02	D	P		DRILL 5395-5773 = 378' = 37.8 FPH, WOB 22, RPM 55, TORQUE ON/OFF 8000/4000, SPM 90, GPM 404, MOTOR RPM 64, SPP ON/OFF 1950/1750, P/U-S/O-ROT WT 155-124-135, SLIDE 5407-5499, WOB 25, DIFF 175, MW 9.8#, VIS 41, SPM 90, GPM 404, SPP ON/OFF 1840-1610
1/30/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL 5773-5960 = 187' = 31.2 FPH, MW 9.8#, VIS 38
	6:00 - 7:30	1.50	DRLPRO	05	C	P		CIRCULATE B/U PRIOR TO TRIP, BUILD & PUMP SLUG
	7:30 - 12:30	5.00	DRLPRO	06	A	P		TRIP OUT, DRAG ON BOTTOM 8 STDS = +40-80K, POOH, L/D MUD MOTOR, CHANGE BITS
	12:30 - 16:30	4.00	DRLPRO	06	A	P		M/U NEW Q506 BIT & MOTOR 1.4 BENT SUB, ORIENT MWD TOOLS, TRIP IN HOLE, FILL PIPE @ SHOE, TRIP IN TO 5700, HIT BRIDGE, UNABLE TO PASS, CONNECT TOP DRIVE
	16:30 - 17:30	1.00	DRLPRO	03	E	P		WASH & REAM F/5700-5960, SPM 80, SPP 2000, RPM 20, TORQUE 4000, WOB 0-5, P/U-S/O-ROT 183-78-145
	17:30 - 0:00	6.50	DRLPRO	02	A	P		DRILL 5960-6200, MW 10.0#, VIS 40, WOB 16-18, TORQUE ON/OFF 8/5K, TD RPM 55, MOTOR RPM 64, SPM 90, GPM 404, SPP ON/OFF 2000/1770, DIFF 230, ST WT UP/DN/ROT 168-136-148K, ROP 25-55
1/31/2009	0:00 - 12:00	12.00	DRLPRO	02	D	P		DRILL 6200-6705 = 505' = 42.1 FPH, MW 10.1#, VIS 43, TD RPM 60, TORQUE ON/OFF 10/4K, MOTOR RPM 72, ST WT P/U-S/O-ROT 173-137-149, WOB 18, ROP 35-70, SPM 100, GPM 450, SPP ON/OFF 2400/2190 RIG SERVICE
	12:00 - 12:30	0.50	DRLPRO	07	A	P		
	12:30 - 15:30	3.00	DRLPRO	02	D	P		DRILL 6705-6811 = 106' = 35.3 FPH, MW 10.1#, VIS 43, TD RPM 60, TORQUE ON/OFF 10/4K, MOTOR RPM 72, ST WT P/U-S/O-ROT 176-141-155, WOB 18, ROP 25-40, SPM 100, GPM 450, SPP ON/OFF 2220/1970

# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/8/2008

End Date: 2/8/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
2/1/2009	15:30 - 16:30	1.00	DRLPRO	02	D	P		SLIDE DRILL 6811-6823 = 12', 12 FPH, MW 10.1#, VIS 43, WOB 20-35, DIFF 125, SPM 100, GPM 450, SPP ON/OFF 1970/2200, MM RPM 71, ST WT UP-DN-ROT 176-141-155
	16:30 - 20:00	3.50	DRLPRO	02	D	P		DRILL 6823-6985 = 162' = 46.3 FPH, MW 10.1#, VIS 49, TD RPM 60, TORQUE ON/OFF 10/7K, MOTOR RPM 72, ST WT P/U-S/O-ROT 176-148-162, WOB 21, ROP 25-40, SPM 100, GPM 450, SPP ON/OFF 2390-2230
	20:00 - 0:00	4.00	DRLPRO	08	B	Z		REPAIR RIG, CHANGE ALL VALVES #1 PUMP, SEATS IN MODS 2 & 3, CHANGE ALL VALVES & SEATS MP #2
	0:00 - 1:30	1.50	DRLPRO	08	B	Z		REPAIR RIG-FINISH CHANGING SEATS & VALVES IN MUD PUMPS
	1:30 - 7:30	6.00	DRLPRO	02	D	P		DRILL 6985-7190 = 205' = 34.2 FPH, MW 10.1# 44 VIS, WOB 22, TORQUE ON/OFF 9-11/8K, SPM 100, GPM 450, SPP ON/OFF 2240/2370, TD RPM 60, MM ROP 72, ST WT UP-DN-ROT 180-145-160, ROP 40-70
	7:30 - 9:30	2.00	DRLPRO	02	D	P		SLIDE DRILL 7190-7208 = 18', MW 10.2@, 43 VIS 43, WOB 21, TORQUE 8/3K, SPM 100, GPM 450, MM RPM 72, SPP ON-OFF 2150-2000, ST WT UP-DN-ROT 180-145-160, ROP 9
	9:30 - 11:30	2.00	DRLPRO	02	D	P		DRILL 7208-7285 = 77' = 38.5 FPH, MW 10.2#, VIS 44, TORQUE ON/OFF 11/8K, SPM 100, GPM 450, SPP ON/OFF 2400/2200, TD RPM 50-60, MM ROP 72, ST WT UP-DN-ROT 180-145-160, ROP 40-70
	11:30 - 12:00	0.50	DRLPRO	07	A	P		SERVICE RIG, CHANGE OUT 5 SHAKER SCREENS
	12:00 - 0:00	12.00	DRLPRO	02	D	P		DRILL 7285-7654 = 369' = 30.75 FPH, MW 10.4#, 47 VIS, WOB 20-22, TORQUE ON/OFF 9-12/8K, TD RPM 40-60, MM RPM 72, SPM 100, GPM 450, SPP ON/OFF 2550/2240, STR WT UP-DN-ROT 185-152-166, ROP 20-60
2/2/2009	0:00 - 16:30	16.50	DRLPRO	02	D	P		DRILL 7654-8136 = 482' = 29.2 FPH, MW 10.5, 43 VIS, WOB 20, TORQUE ON/OFF 12/8, SPM 95, GPM 426, SPP ON/OFF 2180/2020, TD RPM 40-60, MM RPM 68, ROP 30-50==SLIDE 7757-7765, WOB 17, P/U-S/O 184-151-166, SPP ON/OFF 2200/2150
	16:30 - 17:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	17:00 - 0:00	7.00	DRLPRO	02	D	P		DRILL 8136-8325 = 189' = 37.8 FPH, MW 10.5#, VIS 41, WOB 18-20, TORQUE ON/OFF 13/9, SPM 95, GPM 426, SPP ON/OFF 2340/2210, RD RPM 40-60, MM RPM 68, ST WT P/U-S/O-ROT 198-165-180
2/3/2009	0:00 - 10:30	10.50	DRLPRO	02	D	P		DRILL 8385- 8695 = 310' = 29.5 FPH, WOB 18, TORQUE ON/OFF 13/9, TD RPM 60, MM RPM 68, SPM 95, GPM 426, SPP OF/OFF 2340/2210, P/U-S/O-ROT WT 210-165-179, MW 10.6, VIS 45
	10:30 - 11:00	0.50	DRLPRO	02	D	P		SLIDE DRILL 8695-8705 = 10', WOB 18-50, TORQUE 2, SPP ON/OFF 2180/2130, SPM 95, GPM 426, MM RPM 68, MW 10.6# VIS 42
	11:00 - 13:30	2.50	DRLPRO	02	D	P		DRILL 8705-8795 = 90' = 180 FPH, MW 10.6# VIS 44, WOB 18-22, TORQUE ON/OFF 13/9, TD RPM 60, MM RPM 68, SPM 95, GPM 426, SPP OF/OFF 2500/2130, P/U-S/O-ROT WT 235-130-187
	13:30 - 15:00	1.50	DRLPRO	02	D	P		SLIDE DRILL 8795-8810 = 15', WOB 18-50, TORQUE 2, SPP ON/OFF 2180/2130, SPM 95, GPM 426, MM RPM 68, MW 10.6# VIS 43

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/8/2008

End Date: 2/8/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
2/4/2009	15:00 - 16:00	1.00	DRLPRO	02	D	P		DRILLING 8810-8889 = 79' = MW 10.6# VIS 44 , WOB 18-22, TORQUE ON/OFF 13/9, TD RPM 60, MM RPM 68, SPM 95, GPM 426, SPP OF/OFF 2500/2130, P/U-S/O-ROT WT 235-130-187
	16:00 - 16:30	0.50	DRLPRO	07	A	P		RIG SERVICE
	16:30 - 18:00	1.50	DRLPRO	02	D	P		SLIDE DRILL 8889-8900 = 11' WOB 18-50, TORQUE 2, SPP ON/OFF 2180/2130, SPM 95, GPM 426, MM RPM 68, MW 10.6#, VIS 41
	18:00 - 20:00	2.00	DRLPRO	02	D	P		DRILL 8900-8985 = 85' = 42.5 FPH, WOB 18-22, MW 10.6# VIS 44 , TORQUE ON/OFF 13/9, TD RPM 60, MM RPM 68, SPM 95, GPM 426, SPP OF/OFF 2500/2130, P/U-S/O-ROT WT 235-130-187
	20:00 - 21:30	1.50	DRLPRO	05	C	P		CCH FOR BIT TRIP, PUMP LCM SWEEP, BUILD SLUG
	21:30 - 0:00	2.50	DRLPRO	06	A	P		TRIP OUT FOR BIT & MOTOR CHANGE, DRAG ON BOTTOM +100K, BLOW DOWN KELLY, POOH
	0:00 - 3:00	3.00	DRLPRO	06	A	P		TRIP OUT BIT #2, L/D MUD MOTOR
	3:00 - 7:00	4.00	DRLPRO	06	A	P		M/U BIT#3, MUD MOTOR, TEST MUD MOTOR, TRIP IN, FILL @ SHOE, CIH TO 6930'
	7:00 - 7:30	0.50	DRLPRO	06	K	P		INSTALL ROTATING HEAD ,FILL PIPE
	7:30 - 8:30	1.00	DRLPRO	06	A	P		TRIP IN HOLE TO 8930'
	8:30 - 9:00	0.50	DRLPRO	03	D	P		W & R 54' TO BTM
	9:00 - 10:00	1.00	DRLPRO	02	D	P		DRILLING 8985-9000=15' WOB,18 MW 10.8VIS 43,RPM 50 MM 68,TQ ON/OFF 13/9,SPP ON/OFF 2360/2160,SPM 95,GPM 426,PU/SO/ROT 240/130/194
	10:00 - 11:00	1.00	DRLPRO	02	D	P		SLIDE DRILL 9000-9015 WOB 18/55,MW 10.8 VIS 43,RPM MM 68,SPP ON/OFF2270/2167
	11:00 - 12:30	1.50	DRLPRO	02	D	P		DRILLING 9015-9079=64' WOB,18 MW 10.8,VIS 43,RPM 50 MM 68,TQ ON/OFF 13/9,SPP ON/OFF 2360/2160,SPM 95,GPM 426,PU/SO/ROT 240/130/194
	12:30 - 15:00	2.50	DRLPRO	02	D	P		SLIDE DRILL 9079-9099 WOB 18/55, PU/SO 240/140, MW 10.8 VIS 43,RPM MM 68,SPP ON/OFF2270/2167
	15:00 - 16:30	1.50	DRLPRO	02	D	P		DRILLING 9099-9173=74 WOB 18,MW 10.8,VIS 43 RPM 50 MM 68,TQ ON/OFF 14/6,SPP ON/OFF2450/2124,SPM 95,GPM 426,PU/SO/ROT 240/140/194
	16:30 - 17:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	17:00 - 0:00	7.00	DRLPRO	02	D	P		DRILLING 9173-9305 =132=18.8 FPH WOB 14-22,MW 10.9,VIS 46 RPM 40-60 MM 68,TQ ON/OFF 14/6,SPP ON/OFF2450/2200,SPM 95,GPM 426,PU/SO/ROT 235/1165/194
2/5/2009	0:00 - 4:30	4.50	DRLPRO	02	D	P		DRILLING 9305-9365=60=13.3FPH,WOB 22 MW 10.9VIS 44,RPM 50,MM 68,TQ ON/OFF15/12,SPP ON/OFF2450/2200,SPM 95,GPM 426,PU/SO/ROT 235/165/195
	4:30 - 6:00	1.50	DRLPRO	05	C	P		CBU,MIX & PUMP SLUG,CHECK FLOW
	6:00 - 7:00	1.00	DRLPRO	06	A	P		TOH TO 8065',LOST POWER TO DWKS
	7:00 - 7:30	0.50	DRLPRO	08	B	P		TROUBLE SHOOT PLC,RE BOOT COMPUTER,& CALIBRATE
	7:30 - 13:00	5.50	DRLPRO	06	A	P		TOH,X/O BIT & M MTR
	13:00 - 15:00	2.00	DRLPRO	06	A	P		TIH TO 2750' ,BREAK CIRC,BLOW DOWN KELLY
	15:00 - 16:30	1.50	DRLPRO	09	A	P		SLIP & CUT DRILL LINE
	16:30 - 19:30	3.00	DRLPRO	06	A	P		TIH TO 6000',BREAK CIRC,CIH TO 9275
	19:30 - 20:00	0.50	DRLPRO	03	D	P		W & R 90' TO BTM



**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: H&P 298/298, H&P 298/298

Event: DRILLING

Start Date: 12/8/2008

End Date: 2/8/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
2/6/2009	20:00 - 20:30	0.50	DRLPRO	02	D	P		DRILLING 9365-9385,WOB 8-15 MW111.0.VIS 48,RPM 45,MM 68,TQ ON/OFF 15/12,SPP ON/OFF 2450/2200,SPM 95,GPM 426,PU/SO/ROT 235/165/204
	20:30 - 22:30	2.00	DRLPRO	02	D	P		SLIDE DRILL 9385-9404 WOB 20-30 MW 11.0 VIS 46,RPM M MTR 68,SSP ON OFF 2475/2250,GPM 426
	22:30 - 0:00	1.50	DRLPRO	02	D	P		DRILLING 9404-9457,WOB 18 MW11.1.VIS 45,RPM 45,MM 68,TQ ON/OFF 15/12,SPP ON/OFF 2450/2200,SPM 95,GPM 426,PU/SO/ROT 235/170/204
	0:00 - 3:00	3.00	DRLPRO	02	D	P		SLIDE DRILL 9457-9480=23=7.6 FPH WOB 35-45 RPM MM 68,SPM 95,GPM 426,SPP ON/OFF 2550/2400 MW 11.1 VIS 43,LOSING MUD 50 BBLS PUMP LCM SWEEPS,BYPASS SHAKERS @9475'
	3:00 - 15:30	12.50	DRLPRO	02	D	P		DRILLING 9480-9880= 400=32 FPH WOB 18,MW 11.6 VIS 43,LCM 5% RPM 45 MM 65, SPM 90,GPM 405,PU/SO/RT 250/165/204TOTAL MUD LOSS 120 BBLS TD 9880'@ 1530 HRS 02/06/2009
	15:30 - 17:00	1.50	DRLPRO	05	C	P		CCH, F/ WIPER TRIP
	17:00 - 19:30	2.50	DRLPRO	06	E	P		WIPER TRIP TO 8000'
	19:30 - 21:00	1.50	DRLPRO	05	C	P		CCH RU TO LDDS
	21:00 - 0:00	3.00	DRLPRO	06	B	P		SM W/ WEATHERFORD & RIG CREWS LDDS
	0:00 - 5:30	5.50	DRLPRO	06	B	P		LDDS,PULL WEAR BUSHING
2/7/2009	5:30 - 11:30	6.00	DRLPRO	11	G	P		SM RU HALLIBURTON RUN TRIPLE COMBO,LOGGERS TD 9883',RD SAME
	11:30 - 20:00	8.50	DRLPRO	12	A	P		SM RU WEATHERFORD TRS RUN 236 JTS OF 41/2,11.6# I-80 LTC CSG
	20:00 - 21:30	1.50	DRLPRO	05	A	P		LAND CSG W/60K,RU BJ CIRC CSG
	21:30 - 0:00	2.50	DRLPRO	12	E	P		SM W/ BJ,TEST PUMP & LINES,TO 4500#PUMP 20 BBLS MUD CLEAN,442 SKS(255.8 BBLS) LEAD @ 11.1#,1290 SKS (301BBLS) TAIL@ 14.3# SHUT DOWN WASH PUMP& LINES,DROP TOP PLUG DISPLACE W/ 152.8 BBLS FW BUMP PLUG W/ 3450 PSI 500 OVER DIFF PRESS,FLOATS OK,LOST RETURNS START OF DISPLACEMENT,NO CMT TO SURFACE
2/8/2009	0:00 - 2:30	2.50	DRLPRO	12	A	P		LD LANDING JT & SETTING TOOL,SET PACKOFF & TEST TO 5000
	2:30 - 8:30	6.00	DRLPRO	14	A	P		NDBOPE,CLEAN MUD TANKS,RELEASE RIG TO NBU-922-18F4CS@0830 HRS 02/08/2009

# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: MILES 2/2

Event: COMPLETION

Start Date: 10/20/2009

End Date: 11/4/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
10/21/2009	7:00 - 7:30	0.50	COMP	48		P		JSA- RUSU ON NEW BASE BEAM.
	7:30 - 18:00	10.50	COMP	31	I	P		ROADED TO LOC 10/20/09. SPOT NEW BASE BEAM. RUSU. ND WH. NU BOP. SPOT EQUIP. RU FLOOR AND TBG EQUIP. MU 3-7/8 BIT, BIT SUB. RIH AS MEAS AND PU JTS 2-3/8" L-80 TBG. TAG AT 9806' W/ 309-JTS IN.
10/22/2009	7:00 - 7:30	0.50	COMP	48		P		JSA- D/O FC. LD TBG.
	7:30 - 15:30	8.00	COMP	44	A	P		RU PRW SWIVEL W/ #309 AND EST REV CIRC. C/O CMT FRO 9806' TO FC AT 9832'. D/O FC AND 10' HARD CMT TO 9842' W/ 310-JTS 2-3/8" L-80 TBG IN. CIRC CLEAN. RD PWR SWIVEL. POOH AS LD 5-JTS. P-TEST TO 3000#. GOOD. CONT POOH AS LD TBG. LD BIT AND BIT SUB. RD FLOOR. ND BOP. NU FRAC VALVES. RDSU.
10/24/2009	7:00 - 10:00	3.00	COMP	47	C	P		X-OUT FMC TBG HEAD DUE T/ TBG HEAD IS THE SAME BATCH AS ON THE 18K2 WELL. (( THE ONE THAT PARTED. ))
10/26/2009	7:00 - 7:30	0.50	COMP	48		P		HSM. SIM OPS.
	7:30 - 17:00	9.50	COMP	37	B	P		MIRU B&C QUICK TEST. PSI TEST CSG & BOTH FRAC VALVES T/ 7000#. GOOD TEST. BLEED OFF PSI. RU ON NEXT WELL. MIRU CUTTER'S WL. STG 1)PU 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH PERF F/ 9810'-14', 4 SPF, 16 HOLES. 9792'-94', 3 SPF, 6 HOLES. 9728'-30', 3 SPF, 6 HOLES. 9649'-54', 3 SPF, 15 HOLES. POOH. SWI. WINTERIZE WELL HEAD.

# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: MILES 2/2

Event: COMPLETION

Start Date: 10/20/2009

End Date: 11/4/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
10/27/2009	7:00 - 23:59	16.98	COMP	36	B	P		<p>STG 1) OPEN WELL 1109#  BEG PUMPING, BRK @ 3930# @ 6.4 BPM. SD ISIP 3103#, FG .75. BEG FRAC. EST INJT RT @ 51.4 BPM @ 5453# = 100% PERF'S OPEN.  PUMP 44,977# 30/50 WHITE &amp; TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2981# FG .74.  SWI. X-OVER T/ GREEN.</p> <p>STG 2)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 &amp; 120 DEG PHASING. RIH SET CBP @ 9628' P/U PERF F/  9596'-98', 4 SPF, 8 HOLES.  9575'-78', 4 SPF, 12 HOLES.  9494'-96', 4 SPF, 8 HOLES.  9450'-52', 3 SPF, 6 HOLES.  9366'-68', 3 SPF, 6 HOLES.  POOH.  OPEN WELL 2680#.  BEG PUMPING, BRK @ 3080# @ 6.4 BPM. SD ISIP 2680# FG .71. BEG FRAC. EST INJT RT @ 51.4 BPM @ 5700# =81% PERFS OPEN. PUMP 40,969# 30/50 WHITE &amp; TAIL IN W/ 5,000# TLC. SD ISIP 2970# FG .74.  SWI. X-OVER T/ GREEN WELL.</p> <p>STG 3)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90,120 &amp; 180 DEG PHASING. RIH SET CBP @ 9,354' P/U PERF F/  9320'-24', 4 SPF, 16 HOLES.  9268'-72', 3 SPF, 12 HOLES.  9086'-92', 2 SPF, 12 HOLES.  POOH.  WHP 2,356 PSI, BRK 3,556 PSI @ 6.4 BPM. ISIP 2,767 PSI, FG .74.  PUMP 100 BBLS @ 51.5 BPM @ 5,460 PSI = 100% HOLES OPEN.  MP 5,844 PSI, MR 51.7 BPM, AP 5,060 PSI, AR 47.5 BPM, ISIP 2,706 PSI, FG .72, NPI -61 PSI.  PMP 836 BBLS SW &amp; 25,905 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 30,905 LBS,</p> <p>STG 4 ) PU 4 1/2" HAL CBP &amp; 3 3/8" EXP GNS, 23 GRM, .36 HOLES, 90 &amp; 120 DEG PHASING. RIH SET CBP @ 9,060' &amp; PERF 9,026' - 30' 4SPF, 8,964' - 70' 3SPF, 8,902' - 04' 3SPF, 40 HOLES  WHP 2,218 PSI, BRK 2,841 PSI @ 6.3 BPM. ISIP 2,557 PSI, FG .72.  PUMP 100 BBLS @ 51.5 BPM @ 4,950 PSI = 100% HOLES OPEN.  MP 5,567 PSI, MR 51.7 BPM, AP 4,614 PSI, AR 47.9 BPM, ISIP 2,882 PSI, FG .75, NPI 325 PSI.  PMP 879 BBLS SW &amp; 27,239 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 32,239 LBS,</p> <p>STG 5 ) PU 4 1/2" HAL CBP &amp; 3 3/8" EXP GNS, 23 GRM, .36 HOLES, 90 &amp; 120 DEG PHASING. RIH SET CBP @ 8,862' &amp; PERF 8,828' - 32' 3SPF, 8,790' - 92' 4SPF, 8,726' - 28' 4SPF, 8,654' - 56' 3SPF, 8,618' - 20' 3SPF, 40 HOLES.  WHP 875 PSI, BRK 3,554 PSI @ 6.5 BPM. ISIP 2,246 PSI, FG .69.</p>

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18K1BS (RED WELL)							Spud Date: 12/30/2008			
Project: UTAH-UINTAH				Site: NBU 922-18L PAD				Rig Name No: MILES 2/2		
Event: COMPLETION				Start Date: 10/20/2009				End Date: 11/4/2009		
Active Datum: RKB @4,925.00ft (above Mean Sea Level)				UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0						
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation		
								PUMP 100 BBLS @ 56.3 BPM @ 5,450 PSI = 76% HOLES OPEN. MP 5,509 PSI, MR 56.6 BPM, AP 4,666 PSI, AR 54 BPM, ISIP 2,662 PSI, FG .74, NPI 416 PSI. PMP 3,306 BBLS SW & 133,872 LBS OF 30/50 SND & 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 138,872 LBS,  STG 6 ) PU 4 1/2" HAL CBP & 3 3/8" EXP GNS, 23 GRM, .36 HOLES, 120 DEG PHASING. RIH SET CBP @ 8,512' & PERF 8,478' - 82' 3SPF, 8,424' - 30' 3SPF, 8,356' - 60' 3SPF, 42 HOLES.  SWI SDFN. HSM. FRACING & PERFORATING		
10/28/2009	6:30 - 7:00	0.50	COMP	48		P				

# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: MILES 2/2

Event: COMPLETION

Start Date: 10/20/2009

End Date: 11/4/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:00 - 15:00	8.00	COMP	36	B	P		<p>STG 6 ) WHP 1577 PSI, BRK 3775 PSI @ 6.4 BPM. ISIP 1705 PSI, FG .63.  PUMP 100 BBLS @ 51.4 BPM @ 4800 PSI = 62% HOLES OPEN.  MP 5368 PSI, MR 51.8 BPM, AP 4417 PSI, AR 47.5 BPM, ISIP 2693 PSI, FG .75, NPI 988 PSI.  PMP 1461 BBLS SW &amp; 54,684 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 59,684 LBS,</p> <p>STG 7)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 &amp; 120 DEG PHASING. RIH SET CBP @ 8180' P/U PERF F/  8146'-50', 4 SPF, 16 HOLES.  8104'-06', 4 SPF, 8 HOLES.  8064'-68', 3 SPF, 12 HOLES.  7956'-58', 3 SPF, 6 HOLES.  POOH.  WHP 900 PSI, BRK 2643 PSI @ 6.4 BPM. ISIP 1634 PSI, FG .63.  PUMP 100 BBLS @ 51.4 BPM @ 4300 PSI = 79% HOLES OPEN.  MP 4969 PSI, MR 51.7 BPM, AP 3891 PSI, AR 43.1 BPM, ISIP 2383 PSI, FG .73, NPI 749 PSI.  PMP 1461 BBLS SW &amp; 17,965 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 22,965 LBS,  SWI. X-OVER T/ GREEN WELL.</p> <p>STG 8)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7888' P/U PERF F/  7852'-58', 4 SPF, 24 HOLES.  7820'-24', 4 SPF, 16 HOLES.  POOH.  WHP 610 PSI, BRK 3229 PSI @ 6.4 BPM. ISIP 2221 PSI, FG .71.  PUMP 100 BBLS @ 51.4 BPM @ 4900 PSI = 81% HOLES OPEN.  MP 5219 PSI, MR 51.8 BPM, AP 4293 PSI, AR 45.1 BPM, ISIP 2750 PSI, FG .78, NPI 529 PSI.  PMP 774 BBLS SW &amp; 25,345 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 30,345 LBS,  SWI.  PU 4 1/2 8K HAL CBP. RIH SET KILL PLUG @ 7770'. POOH, SWI.  FINISH PAD.  RDMO CUTTER'S WL &amp; SCHLUMBERGER FRAC SERV.  GREAT JOB BY BOTH.  DRILLING PLUGS  MIRU, ND FRAC VALVE, NU BOP'S, NU MILL, POBS, XN SN, PU TBG, RIH WITH TBG, TAG 1ST PLUG @ 7770'.  1ST PLUG 7770' 0' SAND 8 MIN 200# KICK  2ND PLUG 7888' 10' SAND 20 MIN 400# KICK  3RD PLUG 8180' 30' SAND 10 MIN 600# KICK  TURN WELL TO FBC FOR NIGHT.</p>
10/30/2009	7:00 - 7:30	0.50	COMP	48		P		
	7:30 - 7:30	0.00	COMP	44		P		

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18K1BS (RED WELL)

Spud Date: 12/30/2008

Project: UTAH-UINTAH

Site: NBU 922-18L PAD

Rig Name No: MILES 2/2

Event: COMPLETION

Start Date: 10/20/2009

End Date: 11/4/2009

Active Datum: RKB @4,925.00ft (above Mean Sea Level)

UWI: NE/SW/0/9/S/22/E/18/0/0/6/PM/S/2,551.99/W/0/1,214.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
10/31/2009	7:00 - 7:30	0.50	COMP	48		P		DRILL PLUGS
	7:30 - 7:30	0.00	COMP	44		P		DRILL PLUGS PLUG #4 8512' 30' SAND 10 MIN 700# KICK PLUG #5 8862' 20' SAND 10 MIN 200# KICK PLUG #6 9060' 20' SAND 8 MIN 300# KICK PLUG #7 9366' 15' SAND 10 MIN 200# KICK PLUG #8 9628' 20' SAND 15 MIN 200# KICK RIH TO 9831' TAG, 310 JTS, LD 17 JTS TO 9321' LAND TBG. ND BOP'S, NU WH, PUMP OFF BIT SUB.1500# TURN TO FBC 1:00 PM. RDMO TO BLUE WELL
11/1/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2825#, TP 1725#, 20/64" CK, 45 BWPH, TRACE SAND, LIGHT GAS TTL BBLS RECOVERED: 3080 BBLS LEFT TO RECOVER: 7702
	10:30 -		PROD	50				WELL TURNED TO SALES @ 1030 HR ON 11/01/2009 - 1300 MCFD, 1080 BWPD, FTP 1850#, CP 3200#, CK 20/64"
11/2/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 3350#, TP 1975#, 20/64" CK, 32 BWPH, TRACE SAND, 1320 GAS TTL BBLS RECOVERED: 4013 BBLS LEFT TO RECOVER: 6769
11/3/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 3000#, TP 1950#, 20/64" CK, 28 BWPH, TRACE SAND, 1341 GAS TTL BBLS RECOVERED: 4731 BBLS LEFT TO RECOVER: 6051
11/4/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 2775#, TP 1775#, 20/64" CK, 20 BWPH, TRACE SAND, 1875 GAS TTL BBLS RECOVERED: 5478 BBLS LEFT TO RECOVER: 573
	7:00 -			33	A			7 AM FLBK REPORT: CP 2725#, TP 1750#, 20/64" CK, 20 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 5404 BBLS LEFT TO RECOVER: 5378



# **ANADARKO PETROLEUM CORP.**

**UINTAH COUNTY, UTAH (nad 27)**

**NBU 922-18 PAD EFKL**

**NBU 922-18K1BS**

**1**

**Survey: FINAL**

## **Standard Survey Report**

**08 April, 2009**



**Weatherford®**

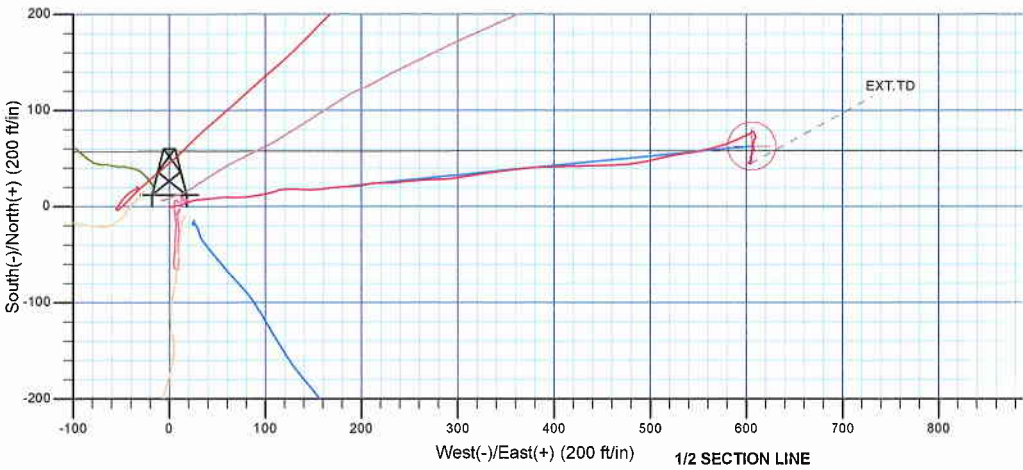
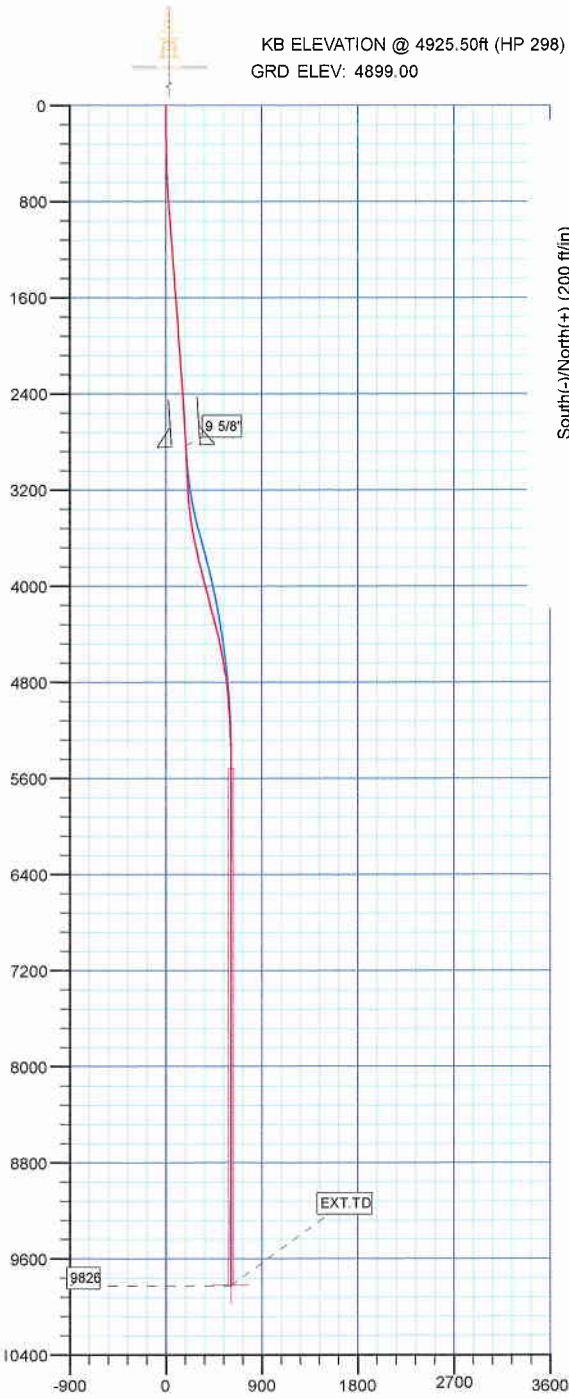




WELL DETAILS: NBU 922-18K1BS						
+N/-S	+E/-W	Northing	Ground Level: Easting	Latitude	Longitude	Slot
0.00	0.00	14542674.96	2064293.85	40° 2' 8.790 N	109° 29' 8.550 W	

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
2840.00	3.61	87.36	2832.76	20.88	184.95	0.00	0.00		
2940.00	4.19	83.42	2932.46	21.93	192.57	0.00	0.00		
3582.26	17.03	84.39	3562.41	33.87	309.99	2.00	1.28		
3738.24	17.03	84.39	3711.55	38.34	355.46	0.00	0.00		
5441.67	0.00	0.00	5390.00	62.92	605.62	1.00	180.00		
9871.67	0.00	0.00	9820.00	62.92	605.62	0.00	0.00		PBHL-K1BS

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
5033.00	5084.44	WASATCH
7766.00	7817.67	MESAVERDE



WELLBORE TARGET DETAILS (LAT/LONG)						
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL-K1BS	9820.00	62.92	605.62	40° 2' 9.310 N	109° 29' 0.750 W	Circle (Radius: 25.00)

Survey: Survey #1 (NBU 922-18K1BS/1)								
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
9880.00	0.63	156.80	9826.20	44.58	604.18	0.00	0.00	605.55

**Company:** ANADARKO PETROLEUM CORP.  
**Project:** UINTAH COUNTY, UTAH (nad 27)  
**Site:** NBU 922-18 PAD EFKL  
**Well:** NBU 922-18K1BS  
**Wellbore:** 1  
**Design:** 1

**Local Co-ordinate Reference:** Well NBU 922-18K1BS  
**TVD Reference:** KB ELEVATION @ 4925.50ft (HP 298)  
**MD Reference:** KB ELEVATION @ 4925.50ft (HP 298)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

<b>Project</b>	UINTAH COUNTY, UTAH (nad 27),		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Fee	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		

Site	NBU 922-18 PAD EFKL, SEC 18 T9S R22E				
Site Position:		Northing:	14,542,660.22 ft	Latitude:	40° 2' 8.640 N
From:	Lat/Long	Easting:	2,064,319.77 ft	Longitude:	109° 29' 8.220 W
Position Uncertainty:	0.00 ft	Slot Radius:	0.00 in	Grid Convergence:	0.97 °

Well	NBU 922-18K1BS,					
Well Position	+N/-S	0.00 ft	Northing:	14,542,674.96 ft	Latitude:	40° 2' 8.790 N
	+E/-W	0.00 ft	Easting:	2,064,293.85 ft	Longitude:	109° 29' 8.550 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,899.00 ft

<b>Wellbore</b>	1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	BGGM2007	12/29/2008	11.42	65.95	52,583

<b>Design</b>	1				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	84.07	

<b>Survey Program</b>	<b>Date</b> 4/8/2009				
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
172.00	9,880.00	Survey #1 (1)	MWD	MWD - Standard	

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172.00	0.54	104.48	172.00	-0.20	0.78	0.76	0.31	0.31	0.00
234.00	0.56	111.30	233.99	-0.39	1.35	1.30	0.11	0.03	11.00
326.00	1.06	51.42	325.99	-0.02	2.43	2.42	1.00	0.54	-65.09
418.00	1.31	85.55	417.97	0.59	4.15	4.19	0.80	0.27	37.10
510.00	2.00	91.05	509.93	0.65	6.80	6.83	0.77	0.75	5.98
602.00	3.19	71.30	601.83	1.44	10.83	10.92	1.60	1.29	-21.47
695.00	3.69	69.05	694.67	3.34	16.08	16.34	0.56	0.54	-2.42
787.00	4.50	71.80	786.43	5.52	22.27	22.72	0.91	0.88	2.99
879.00	4.81	84.67	878.13	7.01	29.54	30.11	1.18	0.34	13.99
971.00	5.44	82.67	969.76	7.92	37.71	38.32	0.71	0.68	-2.17
1,064.00	4.63	88.42	1,062.40	8.59	45.83	46.47	1.03	-0.87	6.18
1,156.00	5.06	81.80	1,154.07	9.27	53.56	54.23	0.77	0.47	-7.20

**Company:** ANADARKO PETROLEUM CORP.  
**Project:** UTAH COUNTY, UTAH (nad 27)  
**Site:** NBU 922-18 PAD EFKL  
**Well:** NBU 922-18K1BS  
**Wellbore:** 1  
**Design:** 1

**Local Co-ordinate Reference:** Well NBU 922-18K1BS  
**TVD Reference:** KB ELEVATION @ 4925.50ft (HP 298)  
**MD Reference:** KB ELEVATION @ 4925.50ft (HP 298)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

**Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,251.00	4.38	90.42	1,248.75	9.84	61.33	62.02	1.03	-0.72	9.07
1,346.00	4.94	93.42	1,343.44	9.57	69.04	69.66	0.64	0.59	3.16
1,440.00	4.69	84.30	1,437.11	9.71	76.91	77.50	0.86	-0.27	-9.70
1,535.00	5.38	84.92	1,531.74	10.49	85.21	85.84	0.73	0.73	0.65
1,630.00	4.98	79.00	1,626.35	11.67	93.69	94.40	0.70	-0.42	-6.23
1,725.00	5.13	79.67	1,720.98	13.22	101.92	102.74	0.17	0.16	0.71
1,819.00	5.69	68.92	1,814.57	15.65	110.40	111.43	1.23	0.60	-11.44
1,913.00	3.38	82.05	1,908.27	17.71	117.49	118.70	2.68	-2.46	13.97
2,008.00	4.19	89.80	2,003.06	18.11	123.74	124.95	1.01	0.85	8.16
2,103.00	4.44	90.67	2,097.79	18.08	130.89	132.05	0.27	0.26	0.92
2,198.00	4.88	94.42	2,192.48	17.72	138.59	139.68	0.56	0.46	3.95
2,293.00	5.44	88.54	2,287.09	17.53	147.12	148.15	0.81	0.59	-6.19
2,387.00	4.00	86.67	2,380.77	17.83	154.85	155.86	1.54	-1.53	-1.99
2,482.00	3.94	82.67	2,475.55	18.44	161.40	162.44	0.30	-0.06	-4.21
2,577.00	3.63	79.67	2,570.34	19.40	167.59	168.70	0.39	-0.33	-3.16
2,672.00	3.63	88.55	2,665.15	20.01	173.56	174.69	0.59	0.00	9.35
2,767.00	4.19	83.42	2,759.93	20.48	180.01	181.16	0.69	0.59	-5.40
2,829.00	3.69	87.05	2,821.78	20.85	184.25	185.42	0.90	-0.81	5.85
<b>9 5/8"</b>									
2,840.00	3.61	87.36	2,832.76	20.88	184.95	186.12	0.72	-0.70	2.86
2,892.00	3.25	89.05	2,884.66	20.98	188.06	189.22	0.72	-0.70	3.24
2,986.00	3.12	84.65	2,978.52	21.26	193.27	194.44	0.29	-0.14	-4.68
3,081.00	2.94	87.05	3,073.39	21.63	198.28	199.45	0.23	-0.19	2.53
3,265.00	4.00	73.05	3,257.05	23.74	209.13	210.47	0.73	0.58	-7.61
3,360.00	6.69	91.42	3,351.63	24.57	217.84	219.21	3.32	2.83	19.34
3,455.00	9.25	86.92	3,445.71	24.85	230.99	232.33	2.77	2.69	-4.74
3,549.00	11.49	83.71	3,538.17	26.28	247.85	249.24	2.46	2.38	-3.41
3,643.00	13.38	88.05	3,629.96	27.67	268.03	269.45	2.24	2.01	4.62
3,738.00	13.94	85.30	3,722.28	28.99	290.42	291.86	0.90	0.59	-2.89
3,831.00	14.56	79.42	3,812.42	32.05	313.07	314.71	1.69	0.67	-6.32
3,926.00	15.69	82.42	3,904.13	35.94	337.55	339.45	1.45	1.19	3.16
4,021.00	17.06	84.17	3,995.27	39.05	364.14	366.23	1.53	1.44	1.84
4,115.00	16.31	86.80	4,085.32	41.18	391.04	393.20	1.13	-0.80	2.80
4,210.00	15.63	89.05	4,176.65	42.14	417.16	419.28	0.97	-0.72	2.37
4,304.00	16.13	89.55	4,267.06	42.45	442.87	444.89	0.55	0.53	0.53
4,399.00	16.25	86.67	4,358.30	43.33	469.34	471.30	0.85	0.13	-3.03
4,494.00	15.13	77.05	4,449.77	46.88	494.70	496.89	2.98	-1.18	-10.13
4,589.00	12.13	77.17	4,542.08	51.88	516.52	519.11	3.16	-3.16	0.13
4,684.00	12.00	83.42	4,634.99	55.23	536.06	538.90	1.38	-0.14	6.58
4,778.00	10.64	76.95	4,727.16	58.30	554.22	557.28	1.98	-1.45	-6.88
4,873.00	7.06	74.17	4,821.02	61.88	568.39	571.74	3.79	-3.77	-2.93
4,968.00	5.50	71.72	4,915.44	64.90	578.33	581.94	1.67	-1.64	-2.58
5,063.00	4.44	67.44	5,010.09	67.74	586.05	589.91	1.18	-1.12	-4.51
5,156.00	3.88	66.80	5,102.84	70.36	592.26	596.36	0.60	-0.60	-0.69
5,250.00	2.94	65.67	5,196.67	72.61	597.38	601.69	1.00	-1.00	-1.20
5,345.00	3.02	64.29	5,291.54	74.69	601.86	606.35	0.11	0.08	-1.45
5,439.00	1.63	45.55	5,385.47	76.71	605.04	609.73	1.67	-1.48	-19.94
5,534.00	0.56	85.42	5,480.45	77.69	606.47	611.25	1.32	-1.13	41.97
5,628.00	0.25	119.30	5,574.45	77.62	607.11	611.88	0.40	-0.33	36.04
5,723.00	0.69	140.67	5,669.44	77.08	607.65	612.36	0.49	0.46	22.49
5,817.00	0.88	137.67	5,763.43	76.11	608.50	613.10	0.21	0.20	-3.19
5,912.00	0.81	173.67	5,858.42	74.90	609.06	613.54	0.55	-0.07	37.89
6,005.00	0.99	170.06	5,951.41	73.46	609.27	613.60	0.20	0.19	-3.88
6,100.00	1.38	178.92	6,046.39	71.51	609.44	613.56	0.45	0.41	9.33

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**Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,195.00	0.44	244.42	6,141.38	70.20	609.13	613.12	1.33	-0.99	68.95
6,289.00	0.50	238.54	6,235.38	69.83	608.45	612.41	0.08	0.06	-6.26
6,383.00	0.44	212.17	6,329.37	69.32	607.91	611.82	0.24	-0.06	-28.05
6,477.00	0.56	194.67	6,423.37	68.57	607.60	611.43	0.21	0.13	-18.62
6,571.00	0.88	193.17	6,517.36	67.42	607.32	611.04	0.34	0.34	-1.60
6,666.00	1.00	188.67	6,612.35	65.89	607.03	610.59	0.15	0.13	-4.74
6,761.00	1.13	180.05	6,707.33	64.13	606.90	610.28	0.22	0.14	-9.07
6,856.00	0.94	170.30	6,802.32	62.43	607.03	610.24	0.27	-0.20	-10.26
6,951.00	0.69	168.42	6,897.31	61.10	607.28	610.34	0.26	-0.26	-1.98
7,046.00	0.75	175.55	6,992.30	59.92	607.44	610.38	0.11	0.06	7.51
7,140.00	0.91	167.30	7,086.29	58.58	607.66	610.46	0.21	0.17	-8.78
7,235.00	0.19	251.80	7,181.29	57.79	607.67	610.39	0.96	-0.76	88.95
7,330.00	0.44	232.67	7,276.29	57.52	607.23	609.93	0.28	0.26	-20.14
7,425.00	0.69	222.55	7,371.28	56.88	606.56	609.19	0.28	0.26	-10.65
7,519.00	0.38	203.30	7,465.28	56.18	606.05	608.61	0.38	-0.33	-20.48
7,613.00	0.25	178.30	7,559.28	55.68	605.93	608.44	0.20	-0.14	-26.60
7,707.00	0.56	175.55	7,653.27	55.02	605.97	608.42	0.33	0.33	-2.93
7,801.00	0.25	194.80	7,747.27	54.36	605.96	608.33	0.36	-0.33	20.48
7,896.00	0.25	206.67	7,842.27	53.98	605.81	608.15	0.05	0.00	12.49
7,991.00	0.49	204.50	7,937.27	53.42	605.55	607.83	0.25	0.25	-2.28
8,086.00	0.44	215.17	8,032.27	52.76	605.17	607.38	0.11	-0.05	11.23
8,180.00	0.69	202.30	8,126.26	51.94	604.75	606.88	0.30	0.27	-13.69
8,275.00	0.56	198.55	8,221.25	50.97	604.38	606.42	0.14	-0.14	-3.95
8,369.00	0.13	172.55	8,315.25	50.43	604.25	606.23	0.48	-0.46	-27.66
8,463.00	0.19	71.30	8,409.25	50.37	604.41	606.38	0.27	0.06	-107.71
8,557.00	0.25	108.17	8,503.25	50.36	604.76	606.72	0.16	0.06	39.22
8,652.00	0.25	144.67	8,598.25	50.12	605.07	607.01	0.16	0.00	38.42
8,747.00	0.63	190.80	8,693.25	49.44	605.09	606.96	0.52	0.40	48.56
8,842.00	0.63	208.30	8,788.24	48.47	604.75	606.52	0.20	0.00	18.42
8,936.00	0.69	200.42	8,882.24	47.48	604.31	605.98	0.12	0.06	-8.38
9,030.00	0.38	237.67	8,976.23	46.79	603.85	605.45	0.48	-0.33	39.63
9,125.00	0.38	259.55	9,071.23	46.56	603.27	604.85	0.15	0.00	23.03
9,219.00	0.50	241.29	9,165.23	46.31	602.60	604.16	0.19	0.13	-19.43
9,314.00	0.75	194.42	9,260.22	45.51	602.08	603.56	0.58	0.26	-49.34
9,410.00	0.25	207.05	9,356.22	44.71	601.83	603.23	0.53	-0.52	13.16
9,505.00	0.56	45.92	9,451.22	44.85	602.07	603.48	0.84	0.33	-169.61
9,600.00	0.50	51.42	9,546.21	45.43	602.73	604.20	0.08	-0.06	5.79
9,695.00	0.31	83.05	9,641.21	45.72	603.31	604.80	0.30	-0.20	33.29
9,830.00	0.63	156.80	9,776.21	45.08	603.96	605.39	0.46	0.24	54.63
<b>PBHL-K1BS</b>									
9,873.62	0.63	156.80	9,819.82	44.64	604.15	605.53	0.00	0.00	0.00
<b>EXT.TD</b>									
9,880.00	0.63	156.80	9,826.20	44.58	604.18	605.55	0.00	0.00	0.00

**Casing Points**

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
2,840.00	2,832.76	9 5/8"	9.62	12.25

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**Wellbore:** 1  
**Design:** 1

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**MD Reference:** KB ELEVATION @ 4925.50ft (HP 298)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

**Survey Annotations**

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
9,880.00	9,826.20	44.58	604.18	EXT.TD

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_



# **Weatherford®**

**Weatherford International, Ltd**

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**Robert Scott**

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